GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

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OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Title: Perfect score: US-10-774-147B-30 35 1 МКҮНКМ 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2003bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result		Query Match Length DB	Length	BB	ID	Description
1	35	100.0 6 8	6	8	ADR44749	Adr44749 Human leu
~	31	88.6	886	Ç	ABB91122	Abb91122 Herbicida
ω	30	85.7	o	8	ADR44743	Adr44743 Human leu
4	30	85.7	0	ထ	ADR44737	Adr44737 Human leu
Ų	30	85.7	54	4	AAU17915	Aau17915 Novel hum
o,	30	85.7	54	7	ADG41295	Adg41295 Human res
7	30	85.7	54	7	ADI97069	Adi97069 Human res
8	30	85.7	79	ω	AAG35466	Aag35466 Arabidops
9	30	85.7	114	G	ABP07404	Abp07404 Human ORF

44.	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24		22	21	20	19	18	17	16	15	14	13	12	11	10
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
85.7		85.7		5	5	•	•			85.7	85.7	85.7	•	85.7	•	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	•			85.7		•	
485	485	485	485	467	467	467	463	449	444	439	338	333	315	306	277	258	245	217	215	215	215	206	206	206	199	190	190	190	190	153	153	153	140	
8 7	ω	ω	2	ω	ω	ω	ω	ω	ω	ω	7	4	0	0	4	4	ω	æ	ω	ω	ω	ω	ω	ω	4	σ	4	4	ω	ω	ω	w	W	ω
ADF75199 ADN72983	AAG41407	AAG40086	AAW01459	AAG22957	AAG41408	AAG40087	AAY52216	AAG22958	AAG19285	AAG19286	ADH86481	AAG78291	ADA33577	ABU1 6944	AAB59393	ABB69297	AAG19287	ADN22861	AAG52998	AAG21896	AAG15861	AAG52999	AAG21897	AAG15862	AAM79852	ABG72175	AAM78868	AAB73220	AAB36085	AAG5 3000	AAG15863	AAG21898	AAG35464	AAG35465
Adf75199 Adn72983		Aag40086	Aaw01459	Aag22957	Aag41408	Aag40087	Aay52216	Aag22958	Aag19285	Aag19286			Ada33577	Abu1 6944	Aab59393	Abb69297	Aag19287	Adn22861	Aag52998	Aag21896	Aag15861	Aag52999	Aag21897	Aag15862	Aam79852	Abg72175	Aam78868	Aab73220	Aab36085	Aag53000				Aag35465
Thale cre	Arabidops	Enterococ	Mouse CD4	Acine toba	Protein e	Murine pr	Drosophil	Arabidops	Bacterial	Arabidops	Arabidops	Arabidops	Arabidops	Arabidops					Human pho	Human DSP	Arabidops	Arabidops	Arabidops	Arabidops	Arabidops									

ALI GUMENTS

RESULT 1 ADR44749

ADR44749 standard; peptide; 6 AA.

ADR44749;

04-NOV-2004 (first entry)

Human leukocyte stimulating peptide, P19.

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

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RESULT 2
ABB91122
ID ABB9
XX
AC ABB9
XX
DT 31-P
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                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                    release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New laukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
              31-MAY-2002
                                             ABB91122;
                                                                                                                                                                                                                                                                             Sequence 6 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                    the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-604410/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ryu S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-FEB-2003; 2003US-0455621P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-FEB-2004; 2004WO-KR000225
                                                                        ABB91122 standard; protein; 886 AA.
                                                                                                                                                                                                                                                                                                                         human leukocyte stimulating peptide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to a target cell stimulating peptide where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              response to bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004069858-A2
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(POST-) POSTECH FOUND.
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                                                                                                                                                                    | MKYHKM 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 30; 57pp; English.
                                                                                                                                                                                                                100.0%; Score 35; DB 8; ilarity 100.0%; Pred. No. 1.8e+06; Conservative 0; Mismatches 0;
              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Suh P;
                                                                                                                                                                                                                                               Length 6;
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                                                              Best Local Similarity
Matches 5; Conserv
                                                                                            Query Match
                                                                                                                                                                       parameters, where plant sequences having an E-value greater by a factor of 3 than the E-value of most similar non-plant sequences are selected. The polypeptides or nucleic acids encoding them are useful for identifying modulators. The identified modulators are useful as
                                                                                                                                                                                                                                   for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant organisms using suitable search
                                                                                                                                                                                                                                                                                                                                                                   Identifying plant target proteins for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from non-plant from plant with nucleic acid or amino acid sequences from non-plant
                                                                                                                             Sequence 886 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tietjen K, Weidler M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Herbicidally active polypeptide SEQ ID NO 333.
                                                                                                                                                                                                                                                                                       The invention relates to identifying target proteins (ABB90790-ABB94016)
                                                                                                                                                                                                                                                                                                                    Claim 5; SEQ ID NO 333; 261pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-269010/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-AUG-2001; 2001WO-EP009892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-AUG-2001; 2001WO-EP009892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200210210-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Arabidopsis thaliana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Herbicidal; plant; agriculture; herbicide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FARB ) BAYER AG.
487 MQYHKM 492
                               1 MKYHKM 6
                                                               Conservative
                                                                              88.6%;
                                                               ۲,
                                                                              Score 31; DB 5;
Pred. No. 6.4e+02;
                                                               Mismatches
                                                                                             Length 886;
                                                               Indels
                                                              0;
                                                               Gaps
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0

protein - protein search, using sw model

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Total number of hits satisfying chosen parameters:
                                         Searched:
                                                                                           Scoring table:
                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                        Run on:
                                                                         BLOSUM62
Gapop 10.0 , Gapext 0.5
                                     2105692 seqs, 386760381 residues
                                                                                                                                              US-10-774-147B-30
35
                                                                                                                                                                                                September 29, 2005, 12:04:53 ; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec
                                                                                                                                 1 МКҮНКМ 6
   2105692
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Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A_Geneseq_16Dec04:*
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2: geneseqp1990s:*
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5: geneseqp2002s:*
6: geneseqp2003ss:*
7: geneseqp2003ss:*
8: geneseqp2003ss:* geneseqp2001s: *
geneseqp2002s: *
geneseqp2003as: *
geneseqp2003bs: *
geneseqp2004s: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Query Match Length DB	DB	ID	Description
1	35	100.0	6	8	ADR44749	Adr44749 Human leu
N	31	88.6	886	J	ABB91122	Abb91122 Herbicida
ω	30	85.7	6	Ф	ADR44743	Adr44743 Human leu
4	30	85.7	6	œ	ADR44737	Adr44737 Human leu
ഗ	30	85.7	54	4	AAU17915	Aau17915 Novel hum
6	30	85.7	54	7	ADG41295	Adg41295 Human res
7	30	85.7	54	7	ADI 97069	Adi97069 Human res
œ	30	85.7	79	ω	AAG35466	Aag35466 Arabidops
9	30	85.7	114	თ	ABP07404	Abp07404 Human ORF
10	30	85.7	125	ω	AAG35465	Aag35465 Arabidops
11	30	85.7	140	ω	AAG35464	Aag35464 Arabidops
12	30	85.7	153	ω	AAG21898	Aag21898 Arabidops
13	30	85.7	153	ω	AAG15863	Aag15863 Arabidops
14	30	85.7	153	ω	AAG53000	Aag53000 Arabidops
15	30	85.7	190	ω	AAB36085	Aab36085 Human DSP

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
485	485	485	485	485	467	467	467	463	449	444	439	338	333	315	306	277	258	245	217	215	215	215	206	206	206	199	190	190	190
σ.	7	ω	ω	N	ω	ω	ω	ω	ω	ω	ω	7	4	σ	σ	4	4	ω	œ	ω	ω	ω	ω	ω	ω	4	σ	4	4.
ADN72983	ADF75199	AAG41407	AAG40086	AAW01459	AAG22957	AAG41408	AAG40087	AAY52216	AAG22958	AAG19285	AAG19286	ADH86481	AAG78291	ADA33577	ABU1 6944	AAB59393	ABB69297	AAG19287	ADN22861	AAG52998	AAG21896	AAG15861	AAG52999	AAG21897	AAG15862	AAM79852	ABG72175	AAM78868	AAB73220
Thale							Aag40087 Arabidops				Aag19286 Arabidops	Adh86481 Enterococ	Aag78291 Mouse CD4	Ada33577 Acinetoba	Abul 6944 Protein e	Aab59393 Murine pr		Aag19287 Arabidops			Aag21896 Arabidops				Arabi	Aam79852 Human pro	Abg72175 Human MAP	Human	Aab73220 Human pho

ALI GNMENTS

RESULT 1 ADR44749 Key Modified-site Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human. ADR44749; ADR44749 standard; peptide; 6 AA. Homo sapiens. Human leukocyte stimulating peptide, P19. 04-NOV-2004 (first entry) Location/Qualifiers /note= "C-terminal amide"

WO2004069858-A2.

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RESULT 2
ABB9122
ID ABB9
XX ABB9
XX ABB9
XX ABB9
XX BB9
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating archidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 30; 57pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-FEB-2003; 2003US-0455621P.
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                                                                                                         Herbicidal; plant; agriculture; herbicide.
                                                                                                                                                                                                                                                       31-MAY-2002
                                                                                                                                                                                                                                                                                                                              ABB91122;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neutrophils. The invention is also used to enhance immune response to
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                                                                                                                                                                                Herbicidally active polypeptide SEQ ID NO 333.
                                                                                                                                                                                                                                                                                                                                                                                                      ABB91122 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (POST-) POSTECH FOUND.
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Run

on:

September 29, 2005, 12:15:33 ; Search time 20.6667 Seconds

(without alignments)
21.672 Million cell updates/sec

OM protein - protein search, using sw model

Title:

US-10-774-147B-30

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid sequences from non-plant organisms using suitable search parameters, where plant sequences having an E-value greater by a factor of 3 than the E-value of most similar non-plant sequences are selected.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying plant target proteins for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 886 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The polypeptides or nucleic acids encoding them are useful for identifying modulators. The identified modulators are useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 5; SEQ ID NO 333; 261pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-269010/31.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-AUG-2001; 2001WO-EP009892.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to identifying target proteins (ABB90790-ABB94016)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                               487 MQYHKM 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 МКҮНКМ 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 31; DB 5;
Pred. No. 6.4e+02;
1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
```

0

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0
Maximum DB seq length: 200000000 Total number of hits satisfying chosen parameters: Perfect score: Sequence: Database : Scoring table: 35 1 MKYHKM 6 BLOSUM62 Gapop 10.0 , Gapext 0.5 Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/1aa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/1aa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/1aa/6B_COMB.pep:*

4: /cgn2_6/ptodata/1/1aa/PCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/1aa/backfiles1.pep:* 513545 segs, 74649064 residues 513545

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

No.	Score	% Query Match	% Query Match Length	BG	ID	Description
1	31	88.6	583	4	US-09-248-796A-20244	Sequence 20244, A
2	30	85.7	140	ω	US-08-930-894-4	
ω	30	85.7	277	2	US-08-685-992-30	30
4	30	85.7	277	N	US-09-144-925-30	30,
ഗ	30	85.7	315	۵	US-09-328-352-4864	4864
0	30	85.7	338	4	US-09-134-000C-4366	Sequence 4366, Ap
7	30	65.7	444	4	US-09-248-796A-19173	19173,
ω	30	85.7	463	4	US-10-067-443-3	Sequence 3, Appli
9	30	85.7	643	4	US-09-270-767-40779	
10	30	85.7	643	4	US-09-270-767-55995	Sequence 55995, A
11	29	82.9	312	4	US-09-248-796A-14231	Sequence 14231, A
12	29	82.9	418	4	US-09-543-681A-7378	Sequence 7378, Ap
13	29	82.9	423	4	US-09-270-767-46381	Sequence 46381, A
14	28	80.0	96	4	US-09-270-767-32375	Sequence 32375, A
15	28	80.0	380	4	US-09-248-796A-21305	Sequence 21305, A
16	27	77.1	146	4	US-09-270-767-42622	Sequence 42622, A
17	27	77.1	151	4	US-09-270-767-45274	Sequence 45274, A
18	27	77.1	174	4	US-09-902-540-11679	Sequence 11679, A
19	27	77.1	178	ω	US-09-134-001C-3908	Sequence 3908, Ap
20	27	77.1	220	4	US-09-710-279-1864	Sequence 1864, Ap
21	27	77.1	260	4	US-09-248-796A-18584	16584,
22	27	77.1	270	2	US-08-978-404B-8	Sequence 8, Appli
23	27	77.1	273	N	US-08-978-404B-3	ω

_		-	42		_			37						31		-	_				
		_		-		-		27 77.1			Ī				-		-		Ī		
861 '	861 '	780 '	773 '	677 '	677 (677 (677	677	677	677	677	677	677	677	677	433 (421 (421 (376 4	313 4	273
1 US-09-542-497A-10	1 US-09-826-312A-10	1 US-09-949-016-6372	1 US-09-949-016-10285	1 US-09-902-540-16113	1 US-08-472-679H-193	1 US-08-472-679H-115	3 US-08-375-992A-193	3 US-08-375-992A-115	3 US-08-488-237A-193	3 US-08-488-237A-115	3 US-08-686-968C-193	3 US-08-686-968C-58	3 US-08-295-802-115	3 US-08-480-640A-193	3 US-08-480-640A-115	us-09-328-352-6503	1 US-09-438-185A-869	US-09-198-452A-932	1 US-09-248-796A-16143	US-09-543-681A-6835	US-08-978-404B-6
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
10, Appl	10, Appl	6372, Ap	10285, A		193, App	115, App	193, App	115, App	193, App	115, Apr	193, App	58, Appl	115, App	193, App	115, App	6503, Ap	869, App	932, App	16143, 1	6835, Ap	6, Appli

Search completed: September 29, 2005, 12:42:01 Job time: 20.6667 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Perfect score: US-10-774-147B-30 35

1 MKYHKM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Published_Applications_AA:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*

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0: /cgn2_6/ptodata/1/pubpaa/USO9B_PUBCOMB.pep:*
1: /cgn2_6/ptodata/1/pubpaa/USO9E_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/USO9_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/USO9_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/USI0B_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/USI0B_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/USI0E_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/USI1E_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/USI1E_PUBCOMB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/USI1E_PUB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/USI0E_PUB.pep:*
1: /cgn2_6/ptodata/1/pubpaa/USI0E_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                     /cgn2_6/ptcdata/1/pubpaa/USO6_NEW_PUB.pep:*
/cgn2_6/ptcdata/1/pubpaa/USO6_PUBCOMB.pep:*
/cgn2_6/ptcdata/1/pubpaa/USO7_NEW_PUB.pep:*
/cgn2_6/ptcdata/1/pubpaa/USO7_NEW_PUB.pep:*
/cgn2_6/ptcdata/1/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptcdata/1/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptcdata/1/pubpaa/USO8_NEW_PUB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

Result No.	Score	Query Match	Length	BB	ID	Description
12	35	100.0	6	16	US-10-774-147B-30	Sequence 30, Appl
~	30	85.7	6	16	US-10-774-147B-18	18,
ω	30	85.7	6	16	US-10-774-147B-24	24,
4	30	85.7	54	9	US-09-764-860-533	533,
5	30	85.7	54	14	US-10-074-095-533	ω
σ	30	85.7	54	15	US-10-212-872-533	533,
7	30	85.7	182	16	US-10-767-701-47283	47283
œ	30	85.7	183	15	US-10-424-599-233688	
9	30	85.7	186	16	US-10-425-115-214464	Sequence 214464,
10	30	85.7	187	15	US-10-052-648A-81	Sequence 81, Appl
11	30	85.7	189	14	US-10-087-887-94	94,
12	30	85.7	190	13	US-10-044-205A-42	42,
13	30	85.7	190	13	US-10-044-205A-44	44,
14	30	85.7	190	14	US-10-087-887-95	95,
15	30	85.7	190	15	US-10-052-648A-82	82,
16	30	85.7	217	15	US-10-369-493-5514	5514
17	30	85.7	258	20	US-11-097-143-34683	Sequence 34683, A
18	30	85.7	306	15	US-10-282-122A-44868	Sequence 44868, A
19	30	85.7	311	16	US-10-739-930-9673	Sequence 9673, Ap
20	30	85.7	333	9	US-09-788-626-31	ω
21	30	85.7	371	15	US-10-424-599-285296	Sequence 285296,
22	30	85.7	463	14	US-10-067-443-3	Sequence 3, Appli
23	30	85.7	463	15	US-10-649-273-3	Ψ
24	30	85.7	463	15	US-10-651-722-3	Ψ
25	30	85.7	721	20	US-11-097-143-16797	16
26	30	85.7	822	16	US-10-437-963-112463	
27	30	85.7	962	15	US-10-366-547-85	Sequence 85, Appl

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30
82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	85.7	85.7
192	192	192	192	188	188	188	188	188	188	177	166	152	151	139	0	1291	1153
15	14	14	ø	15	15	15	15	14	14	9	15	15	15	14	16	15	16
US-10-227-577-872	US-10-103-313-547	US-10-091-504-872	US-09-764-869-872	US-10-052-648A-79	US-10-052-648A-78	US-10-052-648A-30	US-10-094-749-2359	US-10-087-887-18	US-10-181-590-6	US-09-864-761-42750	US-10-275-762-67	US-10-275-762-68	US-10-052-648A-80	US-10-087-887-100	US-10-774-147B-32	US-10-366-547-83	US-10-367-094-116
Sequence 872, App	Sequence 547, App	Sequence 872, App	Sequence 872, App	Sequence 79, Appl	Sequence 78, Appl	Sequence 30, Appl	Sequence 2359, Ap	Sequence 18, Appl	Sequence 6, Appli	Sequence 42750, A	Sequence 67, Appl	Sequence 68, Appl	Sequence 80, Appl	ç	Sequence 32, Appl	Sequence 83, Appl	Sequence 116, App

ALI GIMENTS

```
RESULT 1

US-10-774-147B-30

US-10-774-147B-30

Sequence 30, Application US/10774147B

Publication No. US20040248255A1

GENERAL INFORMATION:

APPLICANT: POSCO

APPLICANT: POSCO

APPLICANT: PSCO

APPLICANT: PARK, Sun-Young

APPLICANT: SUH, Pann-Ghill

TITLE OF INVENTION: LEUKOCYTE STIMULATING PEPTIDES

FILE REFERENCE: 10050-03USA

CURRENT APPLICATION NUMBER: US/10/774,147B

CURRENT APPLICATION NUMBER: US 60/445,621

PRIOR APPLICATION NUMBER: US 60/445,621

PRIOR FILING DATE: 2003-02-07
                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn version 3.3
SEQ ID NO 30
LENGTH: 6
TYPE: PRT
                                                                                                            US-10-774-147B-30
                                                                                                                            ORGANISM: Artificial sequence FEATURE:
OTHER INFORMATION: Synthetic FEATURE:
NAME/KEY: Peptide
LOCATION: (1)..(6)
OTHER INFORMATION: P19
Query Match 100.0%; Score 35; DB 16; Length 6; Best Local Similarity 100.0%; Pred. No. 1.7e+06; Matches 6; Conservative 0; Mismatches 0; Indels
```

ç Gaps

0,

밁 5 1 MKYHKM 6

Search completed: September 29, 2005, 12:49:47 Job time : 76.5 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:13:23; Search time 14.5 Seconds (without alignments) 39.814 Million cell updates/sec

Title: Perfect score: US-10-774-147B-30 35 1 МКҮНКМ 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched:

283416

283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

hypothetical prote	T20339	2	217	85.7	30	σ
		,	,	1	,	,
AcMNPV orf58 - Bom	T41803	2	171	85.7	30	ъ
conserved hypothet	AC0439	N	161	85.7	30	4
AcOrf-59 protein -	D72857	2	69	85.7	30	ω
hypothetical prote	T32028	2	558	88.6	31	N
hypothetical prote	T34160	2	64	88.6	31	1
		į		111111		
Description	ID	DB	Match Length DB ID	Match	Score	No.
				Query		Result
				d		

ţ	n .	44	7 4	3 1	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7
12) i	27	7) L	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30
	11.	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	80.0	•	•	•	80.0		•	80.0			٠	•	•		•	85.7	•	٠	85.7	•	٠	•	•	•	85.7	
2/3	1 .	270	2 0	252	217	209	207	189	189	150	65	65	3394	1030	642	642	480	325	325	315	260	166	447	442	328	242	1652	1291	1273	754	580	555	485	463	ω	1	259	ω
٨	י נ	v 1	0 N) N	, ,_	-	Ν	N	N	2	2	N	N	N	N	N	N	N	2	N	2	2	2	2	N	2	2	r	,_	2	2	N	Ν	Ν	N	2	N	2
A4/240	1 6	356160	лα	999	445	484	7019	9999	T30408	T23684	AG1649	AF1590	T18501	734	D90558	G82886	B45600	S32212	T00161	T05512	T28182	T08580	191	T37733	283	E71621	_	A28334	\Box	(II	T28725	S56946	C71400	E84888	4908	G90191	T11068	A69490
tryptase (EC 3.4.2	t cryptas	trat prot	ypothe	thetical prot	3-oxoadipate CoA-t	probable dual spec	-	۳	l pro	1 pro	٢	prot	cal pro	case	٧٢	se IV	-rich b	chain	chain	l pro	-	-	_	Ö,		Cis	hypothetical prote	yrosine-		bran	н.	probable membrane	ocyste	probable O-sialogl	al prot	ypothe	a	LSU ribosomal prot

Search completed: September 29, 2005, 12:39:50
Job time : $14.5 \,\, \text{secs}$

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments) 43.893 Million cell updates/sec

Title: Perfect score: US-10-774-147B-30 35 1 МКҮНКМ 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters:

1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	6	თ	4	ω	N	-	No.	1
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	32	32	32	32	32	35	Score	
85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	91.4	91.4	91.4	91.4	91.4	100.0	Match	}
238	237	229	217	215	215	190	190	189	172	171	161	128	121	69	924	886	631	558	276	218	121	121	3452	1069	962	191	83	485	Length	
	r	2	2	N	2	2	-	N	N	2	N	2	Ν	۳	2	Ν	N	2	<u>, , , , , , , , , , , , , , , , , , , </u>	2	N	2	٢	2	N	Ν	2	_	BB	
RL2_METAC	RL2_ARCFU	Q18969	Q9LJR8	Q8VWI1	Q8LD09	Q9Y346	DUSL_HUMAN	Q9D9D8	Q8B9J2	092424	Q8ZB19	Q7YY19	Q8C3M6	Y059_NPVAC	Q9FXJ6	Q9FYK0	Q9XD02	016656	IBP2_BRARE	Q8T2Q1	Q9KGQ5	Q9MCC4	ASPM_CANFA	Q6BI56	Q9DUT3	Q7Q581	Q76YH3	SAHH_PETCR	ID	
Q8tru4 methanosarc	028357 archaeoglob		Q91jr8 arabidopsis	Q8vwil arabidopsis	_	Q9y346 homo sapien	Q9h596 homo sapien			092424 bombyx mori	-	Q7yy19 cryptospori	Q8c3m6 mus musculu	P41463 autographa		Q9fyk0 arabidopsis	Q9xd02 streptococc		Q9pth3 brachydanio			Q9mcc4 bacteriopha	P62286 canis famil	Q6bi56 debaryomyce		Q7q581 anopheles g	Q76yh3 bacteriopha	Q01781 petroselinu	Description	

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
485	485	485	480	445	435	422	378	314	306	286	259	259	258	240	238
N	N		Ν	N	N	N	N	2	N	N	N	N	N	N	٢
Q8LPS8	Q8LE20	SAHH_ARATH	022145	Q7RH06	Q9SV01	Q6YQR6	Q65A84	Q97ZV8	Q833M3	Q74M16	Q8HN50	047576	Q9VFX4	Q6FV58	RL2_METMA
Q81ps8	Q81e20	023255	022145	Q7rh06	Q9sv01	Q6yqr6	Q65a84	Q97zv8	Q833m3				Q9vfx4		Q8pv47
arabidopsis	arabidopsis	arabidopsis	arabidopsis	plasmodium	arabidopsis	onion yello	caenorhabdi	sulfolobus	enterococcu	lactobacill	brugia mala	onchocerca	drosophila	candida gla	methanosarc

ALI GNMENTS

2 2	င္ပ	გ	ဂ္ဂ	RL	RT	RT.	R.A	RP	RN	RL.	RT	RT	ŖΤ	R.A	RX	R	RF	RN	0X	8	၀င	ဝင္ပ	ဂ္ဂ	20	g Q	DE	DE	DI	II	ဌ	Αc	ID	SAR
control of methylations via regulation of the intracellular concentration of adenosylhomocysteine.		adenosyl-L-methionine-dependent methyl transferase reactions;				"Differential early activation of defense-related genes in el	A Somssich I.E., Bollmann J., Hahlbrock K., Kombrink E., Schulz W.;	P SEQUENCE OF 259-485 FROM N.A.	N [2]	L Proc. Natl. Acad. Sci. U.S.A. 89:4713-4717(1992).	leaves of Petroselinum crispum.";		"Induction by fungal elicitor of S-ade		X MEDLINE=92262510; PubMed=1374911;	C TISSUE=Leaf;	P SEQUENCE FROM N.A.		X NCBI_TaxID=4043;						N Name=SAHH; Synonyms=SHH;	hydrolase) (AdoHcyase).	Adenosylhomocysteinase (EC	25-OCT-2004 (Rel. 45, Last	01-OCT-1993 (Rel.		C Q01781;	D SAHH_PETCR STANDARD; PRT; 485 AA.	RESULT 1 SAHH PETCR

```
Query Match 100.0%; Score 35; DB 1; Length 485; Best Local Similarity 100.0%; Pred. No. 34; Matches 6; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; M81885; AAA33856.1; -.
EMBL; M62756; AAA33855.1; -.
PIR; T15035; T15035.
HSSP; P23526; 1L14.
InterPro; IPR000043; Ad hcy_hydrolase.
Pfam; PF05221; AdoHcyase; 1.
Pfam; PF05221; AdoHcyase; NAD; 1.
TIGREAMS; TIGR00936; ahcv; 1.
                                                                                                                                                                        BINDING
BINDING
BINDING
BINDING
CONFLICT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- CATALYTIC ACTIVITY: S-adenosyl-L-homocysteine + H(2)0 = L-homocysteine + adenosine.
-!- COFACTOR: Binds 1 NAD per subunit.
-!- PATHWAY: Activated methyl cycle.
-!- SUBUNIT: Homotetramer.
-!- TISSUE SPECIFICITY: Mainly in floral buds and stems.
-!- SIMILARITY: Belongs to the adenosylhomocysteinase family.
                                                                                                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                  Hydrolase; NAD; One-carbon metabolism
                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00738; ADOHCYASE_1; 1.
PROSITE; PS00739; ADOHCYASE_2; 1.
190 MKYHKM 195
                     1 MKYHKM 6
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64
139
205
235
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346
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485 PA;
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64 64
139 139
05 205
5 235
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346
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439
L
                                                                                                                                                                      NAD binding (By similarity).
Substrate (By similarity).
C -> D (in Ref. 1; AAA33855).
L -> C (in Ref. 1; AAA33855).
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                                                                                     Gaps
                                                                                     0;
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Search completed: September 29, 2005, 12:38:17 Job time : 71 secs

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GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

4

OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Perfect score: Title: US-10-774-147B-31 34

Scoring table: BLOSUM62 1 MKYHVM 6

Searched: 2105692 seqs, 386760381 residues Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003bs:*
7: geneseqp2003bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Query Match Length DB	DB	10	Description
p.	34	100.0	6	۵	ADR44750	Adr44750 Human leu
2	34	100.0	109	4	AAU1 6530	Aau16530 Human nov
ω	34	100.0	109	6	ABU55599	Human
4	34	100.0	280	თ	ABB99912	Huma
ហ	34	100.0	366	4	AAU1 61 07	Human
6	34	100.0	366	6	ABU55176	Huma
7	34	100.0	490	ဟ	ABP69649	
æ	34	100.0	490	6	AA016430	Human
9	34	100.0	534	7	ADG42180	Human

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192 192 192 192	188	177 188 188 188	177 177 177 177	177 177 177	406 406 406 410 425	567 298 298 298 307 307 307 307 3031
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ALM48580 AAU22098 AAU21820 AAM41109	ABB82163 ADB821791 ADM74734	ABG37020 AAB19008 AAB73221 AAM39323	AAM67394 AAM55008 ABG49053 AAM02967	AAM1 5224 ABB3 4215 AAM2 7685 ABB2 9053	AAG06491 AAG42863 AAG17191 AAG21144 AAG21143 AAG21142	ADA55339 AAG17193 AAG06493 AAG42865 AAG06492 AAG06492 AAG17192 AAG42864 AAG17464 AAY67405 AAW86440 AAY67405 AAW86440
Adm48580 Dual Aau22098 Human Aau21820 Novel Aam41109 Human		₽₽ > ₽				Ada55339 Human Aag17193 Arabi Aag06493 Arabi Aag42865 Arabi Aag42865 Arabi Aag42864 Arabi Aag42864 Arabi Aag42864 Arabi Aay67405 Arabi Aay67406 Arabi Aay67407 Arabi
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ALI GUMENTS

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ADR44750	R44750	SULT 1
standard;		
peptide;		
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6 AA.		

Human leukocyte stimulating peptide, P20.

04-NOV-2004 (first entry)

ADR44750;

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

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RESULT 2
AAU16530
ID AAU1
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AC AAU1
XX
DT 07-1
XX
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                                                                                                                             Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                      The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious
         07-NOV-2001
                                                                                                                                                                  Sequence 6 AA;
                                                                                                                                                                                           diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
                                                                                                                                                                                                                                                                                                                                                                                                                     07-FEB-2003; 2003US-0455621P.
                            AAU16530;
                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 31; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-604410/58.
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Modified-site
                                            AAU16530 standard; protein; 109
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(POST-) POSTECH FOUND.
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                                                                                                  MKYHVM 6
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milarity 100.0%; Pred. No. 1.1
Conservative 0; Mismatches
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22-AUG-2000;
22-AUG-2000;
23-AUG-2000;
30-AUG-2000;
01-SEP-2000;
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14-AUG-2000;
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07-JUL-2000;
07-JUL-2000;
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14-AUG-2000;
14-AUG-2000;
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28-JUN-2000;
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14-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-JUL-2000;
11-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alzheimer's disease; infection; ocular disorder; corneal infection; wound healing; epithelial cell proliferation; skin ageing; food additive;
                                                                                                                                                                                                                                                                                                                                                                                         26-JUL-2000;
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17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human novel secreted protein, Seq ID 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                14-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-MAY-2000;
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2000US-0186350P
2000US-019974P
2000US-0199133P
2000US-029467P
2000US-0214886P
2000US-0215647P
2000US-0216647P
2000US-0217496P
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2000US-022964P
2000US-022954P
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2000US-0225119
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2000US-02251P
2000US-022577P
2000US-0225759P
2000US-0225759P
2000US-022668P
2000US-022668P
2000US-0227182P
2000US-0227182P
2000US-02277182P
2000US-02277P
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; 2000US-0180628P.
; 2000US-0184664P.
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01-SEP-2000
01-SEP-2000
01-SEP-2000
05-SEP-2000
06-SEP-2000
06-SEP-2000
08-SEP-2000
08-SEP-2000
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21-SEP
2000US-0229449

2000US-022944P

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2000US-023945P

2000US-023943P

2000US-0231244P

2000US-0231244P

2000US-0231414P

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2000US-0231968P

2000US-023299P

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2000US-023668P

2000US-02367P

2000US-023637P

2000US-0241785P

2000US-0241787P

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2000US-024677P

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08-NOV-2000)
17-NOV-2000)
17-NO
                                                                                    New nucleic acid molecules encoding 461 diagnosing, preventing, treating or amel used as food additives or preservatives.
                                            Claim
                                                                                                                                                                                                                                                           Rosen
                                                                                                                                                                                     WPI; 2001-488783/53.
N-PSDB; AAS26517.
                                                                                                                                                                                                                                                                                                       (HUMA-)
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                                                                                                                                                                                                                                                                                                          HUMAN
                                            SEQ
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2000US-024652P.
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2000US-024653P.
2000US-0246610P.
2000US-0246611P.
2000US-0246611P.
2000US-0246613P.
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2000US-025198P.
2000US-0251169P.
2000US-025198P.
                                          ID NO 1483;
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                                          980pp; English.
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                                                                                                          461 human secreted ameliorating medica
                                                                                                             medical conditions
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CC encoded secreted proteins. The nucleic acids and proteins are used to CC prevent, treat or ameliorate a medical condition in e.g. humans, mice, CC rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a C pathological condition. Antibodies to the proteins can also be used in CC alleviating symptoms associated with the disorders and in diagnostic C (ELISA). Disorders which are diagnosed or treated include autoimmune CC diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac C arrest, cerebrovascular disorders e.g. altheumer's disease, infections caused by CC bacteria, viruses and fungi and ocular disorders e.g. corneal infection, CC and many other disorders elsted in the specification. The polypeptides CC can also be used to aid wound healing and epithelial cell proliferation, CC to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotraxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities, fat content, lipid, protein, carbohydrate, vitamins, consecuted and other nutritional components. The present sequence represents a novel secreted protein of the invention. Note: The conservation data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
                                                                                                                                                      Human; neural disorder; immune system disorder; renal disorder; muscular disorder; respiratory disease; reproductive disorder; gastrointestinal disorder; pulmonary disorder; cardiovascular disorder; hyperproliferative disorder; inflammatory disease; altergic reaction; blood related disorder; cancer; immunosuppressive; antiinflammatory;
                                                                     Homo
                                                                                                                        cardiovascular; nephrotropic; cytostatic; antiallergic; thrombolytic;
haemostatic; antiarteriosclerotic.
 19-SEP-2002
                                   US2002132753-A1.
                                                                                                                                                                                                                                                                     Human novel polypeptide #686.
                                                                                                                                                                                                                                                                                                                                            ABU55599;
                                                                                                                                                                                                                                                                                                                                                                            ABU55599 standard; protein; 109 AA.
                                                                                                                                                                                                                                                                                                      18-MAR-2003 (first entry)
                                                                     sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        h 100.0%; Score 34; DB 4; Length 109; Similarity 100.0%; Pred. No. 5.8; 6; Conservative 0; Mismatches 0; Indels
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17-JAN-2001;

2001US-00764864

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29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
02-OCT-2000;
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) ROSEN C A.
) RUBEN S M.
) BARASH S C.
                                                                                                         2000US-0179065P.
2000US-0118067P.
2000US-0118067P.
2000US-021680P.
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to human novel polypeptides and their associated polymucleotides. The polypeptides and polymucleotides are useful in gene therapy for treating, inhibiting or preventing neural disorders, immune system disorders (e.g. systemic lupus erythematosus, rheumatoid arthritis
                 CN1345807-A
                                                                           Human; macroprotein 1196-30.80; human KIAA1196 protein homologue; recombinant production; gene therapy; dementia; facial paralysis.
                                                                                                                        Human macroprotein 1196-30.80.
                                                                                                                                                       30-JAN-2003
                                                                                                                                                                                                                   ABB99912 standard; protein; 280 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 11; SEQ ID NO 1483; 402pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polypeptides and nucleic acids, useful in gene therapy for treating, inhibiting or preventing e.g. neural, immune system, muscular, respiratory, reproductive, gastrointestinal, pulmonary, cardiovascular or
                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and multiple sclerosis), muscular disorders, respiratory diseases (e.g.
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                                                                                                                                                                                                                                                                                                                                                      6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             represent human novel polypeptides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ruben SM,
                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Barash
                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SC;
                                                                                                                                                                                                                                                                                                                                                                    Score 34; DB
Pred. No. 5.8;
                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                   6; Length 109;
                                                                                                                                                                                                                                                                                                                                                      0;
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                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                      0
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RESULT 5
AAU16107
ID AAU1
        KW KW KW XX D XX XX
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Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to human macroprotein 1196-30.80 (ABB99912) and nucleic acids encoding it (ABV76281). The protein has a molecular weight of 30.8 kD and has 46% identity and 59% homology over a 176 amino acid stretch with human KIAA1196 protein (GenBank accession number AB033022). The invention also relates to a method for the recombinant production of the protein, an antagonist of the protein, and the use of the protein, gene and antagonist in therapeutic applications. Macroprotein 1196-30.80 can be used in the treatment of a variety of diseases such as dementia and facial paralysis. The present sequence represents human macroprotein 1196-30.80
                         secreted protein; rheumatoid arthritis; hyperproliferative disorder; cardiovascular disorder; cardiac arrest; cerebrovascular disorder; cerebral ischaemia; angiogenesis; nervous system disorder;
                                                                                                    cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; opthalmalogical; vulnerary;
                                                                                                                                                               Human; immunosuppressive; antiarthritic; antirheumatic; cytostatic;
                                                                                                                                                                                                                                                                           07-NOV-2001
                                                                                                                                                                                                                                                                                                                              AAU16107;
                                                                                                                                                                                                                                                                                                                                                                                   AAU16107 standard; protein; 366 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 280 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel polypeptide-human macroprotein 1196-30.80 and polynucleotide encoding the polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB;
Alzheimer's disease; infection; ocular disorder; corneal infection,
                                                                                                                                                                                                                    Human novel secreted protein, Seq ID 1060.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      184 MKYHVM 189
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SHANGHAI BIOWINDOW GENE DEV INC
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                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 34; DB
Pred. No. 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 280,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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01-SEP-2000; 2000US-0229287P. 01-SEP-2000; 2000US-0229343P. 01-SEP-2000; 2000US-0229344P. 01-SEP-2000; 2000US-0229348P. 05-SEP-2000; 2000US-0229348P. 05-SEP-2000; 2000US-0229519P. 06-SEP-2000; 2000US-023043PP. 06-SEP-2000; 2000US-023043PP. 08-SEP-2000; 2000US-0231244P. 08-SEP-2000; 2000US-0231244P.			31-JAN-2000; 2000US-0179065P. 04-FEB-2000; 2000US-0180628P. 24-FEB-2000; 2000US-0180628P. 02-MAR-2000; 2000US-0180830P. 16-MAR-2000; 2000US-0180874P. 17-MAR-2000; 2000US-019076P. 18-PAR-2000; 2000US-019075P. 19-MAY-2000; 2000US-020315P. 97-JUN-2000; 2000US-0209467P. 28-JUN-2000; 2000US-0218135P. 30-JUN-2000; 2000US-0218135P. 97-JUL-2000; 2000US-0218135P. 97-JUL-2000; 2000US-0218647P.	wound healing; epithelial cell proliferation; skin ageing; food additive; preservative; antiproliferative. Homo sapiens. w0200155322-A2. 02-AUG-2001. 17-JAN-2001; 2001WO-US001341.
ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	יי סי ג ג ג ג ג ג ג ג ג ג ג ג ג ג ג ג ג ג ג	ט אַ אָ ס ט ט ט ט ט ט ט ט ט אַ אָ	ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט
0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000; 0B-NOV-2000;	20-0CT-2000; 20-0CT-2000; 20-0CT-2000; 20-0CT-2000; 20-0CT-2000; 20-0CT-2000; 20-0CT-2000; 01-NOV-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000; 08-NOV-2000;	29-SEP-2000; 29-SEP-2000; 02-CCT-2000; 02-CCT-2000; 02-CCT-2000; 02-CCT-2000; 02-CCT-2000; 02-CCT-2000; 13-CCT-2000; 13-CCT-2000; 20-CCT-2000; 20-CCT-2000;	14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 21-SEP-2000; 21-SEP-2000; 25-SEP-2000; 25-SEP-2000; 25-SEP-2000; 26-SEP-2000; 27-SEP-2000; 29-SEP-2000; 29-SEP-2000;	08-SEP-2000; 08-SEP-2000; 08-SEP-2000; 08-SEP-2000; 08-SEP-2000; 11-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000;
2000US-0246523P. 2000US-0246524P. 2000US-0246525P. 2000US-0246525P. 2000US-0246527P. 2000US-0246528P. 2000US-0246528P. 2000US-0246512P. 2000US-0246610P.	2000US-0241785P. 2000US-0241786P. 2000US-0241787P. 2000US-0241808P. 2000US-0241809P. 2000US-0244817P. 2000US-0246474P. 2000US-0246475P. 2000US-0246477P. 2000US-0246477P.		2000US-0232401P. 2000US-0233063P. 2000US-0233064P. 2000US-0233065P. 2000US-0234223P. 2000US-0234274P. 2000US-0234998P. 2000US-0234998P. 2000US-0235494P. 2000US-0235494P. 2000US-0235494P. 2000US-0235497P. 2000US-0235497P. 2000US-0236367P. 2000US-0236367P.	2000US-0231244P. 2000US-0231413P. 2000US-0231414P. 2000US-0232081P. 2000US-0232081P. 2000US-0232397P. 2000US-0232398P. 2000US-0232399P. 2000US-0232399P.

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17-NOV-2000;
01-DEC-2000;
05-DEC-2000;
05-DEC-2000;
06-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
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17-NOV-2000;
17-NOV-2000;
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17-NOV-2000;
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(HUMA-) HUMAN
                                                                      ), 2000US-0249213P, 2000US-0249216P, 2000US-0249216P, 2000US-0249216P, 2000US-0249216P, 2000US-0249244P, 2000US-024926P, 2000US-024926P, 2000US-024926P, 2000US-024926P, 2000US-024929PP, 2000US-024929PP, 2000US-0250391P, 2000US-0251030P, 2000US-0251130P, 2000US-0251130P, 2000US-0251130P, 2000US-0251139PP, 2000US-0251169P, 2000US-025169P, 2000US-025169PP, 2000US-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;; 2000US-0246613P.
; 2000US-0249207P.
; 2000US-0249208P.
; 2000US-0249209P.
; 2000US-0249210P.
; 2000US-0249211P.
; 2000US-0249211P.
; 2000US-0249212P.
    GENOME
    SCI INC
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Barash SC, ĸ

2001-488783/53. AAS26094.

New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions as food additives or preservatives. and

Claim 11; SEQ ID NO 1060; 980pp; English.

encoded secreted proteins. The nucleic acids and proteins are used to prevent, treat or ameliorate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in diagnostic immunosassays e.g. radioimmunosassays or enzyme linked immunosorbant assays (ELISA). Disorders which are diagnosed or treated include autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. The invention relates to isolated nucleic acid molecules and their

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RESULT 6
ABU55176
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CC neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac CC arrest, cerebrovascular disorders e.g. a. cerebral ischaemia, angiogenesis, CC nervous system disorders e.g. Alzheimer's disease, infections caused by CC bacteria, viruses and fungi and ocular disorders e.g. corneal infection, CC and many other disorders listed in the specification. The polypeptides CC can also be used to aid wound healing and epithelial cell proliferation, CC to prevent skin aging due to sumburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used CC as a food additive or preservative to increase or decrease storage capabilities, fat content, lipid, protein, carbohydrate, vitamins, CC minerals, cofactors and other nutritional components. The present sequence represents a novel secreted protein of the invention. Note: The csequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                           Homo
                                      07-JUL-2000;
07-JUL-2000;
                                                                                                                                                                                                                                                                                                             blood related disorder; cancer; immunosuppressive; antiinflammatory; cardiovascular; nephrotropic; cytostatic; antiallergic; thrombolytic
                                                                                                                                                                                                                                                                                                                                                                  muscular disorder; respiratory disease; reproductive disorder; gastrointestinal disorder; pulmonary disorder; cardiovascular disorder;
                                                                          28-JUN-2000;
                                                                                           04-FEB-2000;
                                                                                                              31-JAN-2000;
                                                                                                                                                                                                                                                                                               haemostatic; antiarteriosclerotic.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Human
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                                                                                                                                                                                                                       US2002132753-A1
                                                                                                                                                                                                                                                                                                                                                 hyperproliferative disorder; inflammatory disease; allergic reaction;
                                                                                                                                                                                                                                                                                                                                                                                                      Human; neural disorder; immune system disorder; renal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                        novel polypeptide #263.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard;
; 2000US-0179065P.
; 2000US-0180628P.
; 2000US-0214886P.
; 2000US-021664PP.
; 2000US-021664PP.
; 2000US-0217487P.
; 2000US-0217496P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                2001US-00764864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein; 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
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29-SEP-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
02-OCT-2000;
13-OCT-2000;
20-OCT-2000;
20-OCT-2000;
20-OCT-2000;
17-NOV-2000;
                                                                                                                                                                                                                                                                                   14-AUG-2000;
22-AUG-2000;
30-AUG-2000;
01-SEP-2000;
01-SEP-2000;
01-SEP-2000;
01-SEP-2000;
05-SEP-2000;
05-SEP-2000;
21-SEP-2000;
21-SEP-2000;
25-SEP-2000;
27-SEP-2000;
29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
29-SEP-2000;
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14-AUG-2000;
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26-JUL-2000;
26-JUL-2000;
New polypeptides and nucleic acids, useful in gene therapy for treating, inhibiting or preventing e.g. neural, immune system, muscular, respiratory, reproductive, gastrointestinal, pulmonary, cardiovascular or renal disorders.
                                               N-PSDB; ABX73435.
                                                                                                         (ROSE/)
                                                                                                                                                          08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-AUG-2000;
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                                                                            Rosen CA,
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                                                                                                 BARA/)
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                                                          2003-147444/14.
                                                                                                          RUBEN
                                                                                                BARASH S
                                                                            Ruben SM,
                                                                                                                                                                                                                          2000US-023509P

2000US-023913P

2000US-023423P

2000US-023423P

2000US-0234997P

2000US-023534P

2000US-023537P

2000US-0235367P

2000US-023658P

2000US-023658P

2000US-023658P

2000US-0236370P

2000US-0236802P

2000US-0237037P

2000US-0237039P

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2000US-0220963P.

2000US-0220964P.

2000US-0224518P.

2000US-0224519P.
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; 2000US-0244617P.
; 2000US-0249299P.
; 2000US-0251856P.
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; 2000US-0240960P.
; 2000US-0241785P.
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; 2000US-0229344P.
; 2000US-0229345P.
                                                                                                                                        2000US-0251868P
2000US-0251869P
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2000US-0229287P.
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                                                                             Barash
                                                                             SC;
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RESULT 7
ABP69649
ID ABP66
XX ABP6
XX Huma
XX Huma
XX Huma
XX FAL MARM
XX BALL
XW BALL
XW BALL
XW AARL
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; genome mapping; gene therapy; food supplement; virus; fungus; cell-proliferative disorder; neurodegenerative disease; bacterial; Parkinson's disease; Alzheimer's disease; autoimmune disease; multiple sclerosis; diabetes; genetic disorder; wound; burn; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gastrointestinal disorders, pulmonary disorders, cardiovascular disorders (e.g. congenital heart defects, Ebstein's anomaly and hypoplastic left heart syndrome), renal disorders (e.g. acute kidney failure and end-stage renal disease), hyperproliferative disorders (e.g. Hodgkin's disease and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to human novel polypeptides and their associated polynucleotides. The polypeptides and polynucleotides are useful in gene therapy for treating, inhibiting or preventing neural disorders, immune system disorders (e.g. systemic lupus erythematosus, rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     leukaemia), inflammatory diseases (e.g. septic shock, bursitis and appendicitis), allergic reactions and conditions (e.g. asytma), blood related disorders (e.g. thrombosis, atheroselerosis and myocardial infarction) and cancerous diseases. Sequences ABU54914-ABU55699 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and multiple sclerosis), muscular disorders, respiratory diseases (e.g. nasal vestibulitis, nasal polyps and sinusitis), reproductive disorders,
                                         05-MAR-2002; 2002WO-US005095
                                                                                                                                                                                                                                                                                                                                                                                                 antiparkinsonian; antidiabetic; immunosuppressive; dermatological;
haemostatic; vulnerary; fungicide; antibacterial; virucide; protozoacide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human polypeptide SEQ ID NO 1696.
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                                                                                                                         12-SEP-2002.
                                                                                                                                                                                                        WO200270539-A2
                                                                                                                                                                                                                                                                                                                                                                   antiarthritic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    arthritis; cytostatic; immunomodulator; nootropic; neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-JAN-2003 (first entry)
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Similarity 100.0%;
6; Conservative 0
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%; Pred. No. 23;
0; Mismatches
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RESULT 8
AAO16439
ID AAO1
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AC AAO1
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DT 10-)
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DE Hum
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KW Hum
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                                                                                                                                                                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                     protein or complementary sequences. The polynucleotides are useful for identifying expressed genes or for physical mapping of human genome. The encoded polypeptides (ABP66902-ABP69949) are useful as molecular weight markers, as a food supplement, for generating antibodies, in medical imaging, screening and diagnostic assays and for treating cell-proliferative disorders (cancer), neurodegenerative diseases (Parkinson's or Alzhaimer's disease), autoimmune diseases (multiple sclerosis, diabetes, lupus) genetic disorders, myeloid or lymphoid disorders, platelet or coagulation disorders, wound, burns, incision, ulcers, liver or lung fibrosis, infections (bacterial, viral, fungal, parasitic), arthritis, etc. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format
   Human; nucleic acid-associated protein; NAAP; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated polynucleotide (I) comprising a nucleotide sequence selected from any of 948 sequences (ABZ11119-ABZ12066) or their mature protein coding portion, active domain coding
                                      Human núcleic acid-associated protein (NAAP) - SEQ ID No 27
                                                                          10-APR-2003
                                                                                                                                               AAO16430 standard; protein; 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 9; SEQ ID NO 1696; 1012pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            or coagulation disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polynucleotides comprising sequences assembled from expressed sequence tags (ESTs), useful for treating cell-proliferative, neurodegenerative, autoimmune, genetic, myeloid or lymphoid, or platelet
                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-759812/82.
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                                                                                                                                                                                                                                                                                                           Watch 100.0%; Score 34; DB Local Similarity 100.0%; Pred. No. 32; Local Similarity 0; Mismatches
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                                                                                                                                                                                                                                                            1 MKYHVM 6
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                                                                                                                                                                                                                                          MKYHVM 140
                                                                                                                                                                                                                                                                                                                                                                                        490 AA;
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                                                                          (first entry)
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Ma Y, Yamazaki V, Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wang D,
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R, Wang Z,
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Z, Ghosh M;
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05-MAR-2001; 2001US-00799451.

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                                                                                The invention comprises the amino acid and coding sequences of human nucleic acid-associated proteins (NAAP). The DNA and protein sequences of the invention are useful for diagnosing, treating or preventing disorders associated with aberrant expression of NAAP, such as: cell proliferative disorders (e.g. arteriosclerosis, atherosclerosis, cirrhosis, hepatitis or cancer; developmental disorders (e.g. renal tubular acidosis, anaemia or mental retardation); neurological disorders (e.g. Albaimer's disease, Parkinson's disease or epilepsy); and autoimune/inflammatory disorders (e.g. Alba; allergies, asthma or Crohn's disease). The DNA sequences of the invention are useful for creating transgenic animals to model human disease. The present amino acid sequence represents a human nucleic acid-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ramkumar J, Gr.
Borowsky ML, Y
Richardson TW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gandhi AR,
Arvizu CS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid-associated proteins and polynucleotides, useful for diagnosing, treating or preventing cell proliferative (e.g. cancer), neurological (e.g. epilepsy or Parkinson's disease), or autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cell proliferative disorder; atherosclerosis; cirrhosis; hepatitis; AIDS; cancer; developmental disorder; renal tubular acidosis; anaemia; asthma; mental retradation; neurological disorder; Albeimer's diseases epilepsy; Parkinson's disease; autoimmune disorder; inflammatory disorder; allergy;
Sequence 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disorders (e.g. AIDS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB;
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06-JUL-2001;
                                                           associated protein of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 257-258; 312pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (INCY-) INCYTE GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-JUN-2001;
29-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUN-2002; 2002WO-US021179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-MAR-2002;
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DB; AAL51580.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J, Griffin JA, Yang J, San ML, Yao MG, Walia NK, Banc Riliott VS, Luo W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; 2001US-030051BP.

2001US-03017B7P.

; 2001US-0301792P.

; 2001US-0301892P.

; 2001US-0301893P.

; 2001US-0303442P.

; 2002US-0306443BP.
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Ison CH, Honchell CD, Lee EA, Yue H,
Griffin JA, Yang J, Sanjanwala MM, I
, Yao MG, Walia NK, Bandman O, Lal P
TW, Elliott VS, Luo W, Tang YT, Zeba
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                                                               the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          al PG, Becha SD,
Zebarjadian Y, Lu
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Query Match

100.0%; Score 34; 멂 6,

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RESULT 9
ADG42180
ID ADG4
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XX
AC ADG4
XX
DT 26-F
XX
DE Huma
XX
KW Huma
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Huma
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                          Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative 0.
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Matches 6; Conserv
                                                                                                                                  and foetal brains and human adult hippocampus. The invention is useful for preparation of recombinant proteins derived from whole human adult for proteins derived from the brains and human adult hippocampus. Protein chips prepared from the base sequences are useful for diagnosis of systematic diseases. This sequence represents a human brain/hippocampus polypeptide used in
                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 73; 183pp; Japanese.
                                                                                                                                                                                                                                                                      Direct cloning and determination of base sequences of DNAs containing a region encoding for proteins from cDNA libraries derived from whole human adult and fetal brains, and human adult hippocampus.
                                                                                         Sequence 534 AA;
                                                                                                                                                                                                             The invention relates to cDNA libraries derived from whole human adult
                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-460752/44.
                                                                                                                                                                                                                                                                                                                                                                                                           25-APR-2001; 2001JP-00127066.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; brain; hippocampus; protein chip; adult brain; foetal brain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human brain/hippocampus polypeptide #28.
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                                                                                                                                                                                                                                                                                                                                                                             (KAZU-) ZH KAZUSA DNA KENKYUSHO
                                                                                                                     scope of the invention.
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   1 MKYHVM 6
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Conservative 0
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                             0;
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                            Score 34; DB
Pred. No. 36;
0; Mismatches
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0; Mismatches
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                                                        Length 534;
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ADA55339
ID ADA55
                                                                         망
            Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative 0
                                                                                                                The present invention relates to novel human secretory or membrane proteins (ADA54072-ADA55710) and their coding sequences (ADA52433-ADA54071). The coding sequences are useful in the gene therapy of diseases caused by abnormalities of the proteins, e.g. cancer,
                                                                                                                                                                                                                        New polynucleotides encoding full-length polypeptides, e.g. secretory and/or membrane proteins, useful for developing medicines for diseases which the gene is involved, or as target molecules for gene therapy.
                                                                        Sequence 567
                                                                                                                                                                                                                                                                                     WPI; 2003-395539/38.
N-PSDB; ADA53700.
                                                                                                                                                                                                                                                                                                                                Yamamoto J, Isono Y,
Seki N, Yoshikawa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytostatic; Anti-inflammatory; Osteopathic; Neuroprotective; Nootropic; Gene Therapy; human; secretory protein; membrane proteins; cancer; inflammatory disease; osteoporosis; neurological disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA55339 standard; protein; 567 AA
                                                                                                                                                                                            Claim 14; SEQ ID NO 2907; 205pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                       14-SEP-2001; 2001JP-00328381.
24-JAN-2002; 2002US-0350435P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human protein, SEQ ID 2907
                                                                                                    inflammatory diseases, osteoporosis or neurological disease.
                                                                                                                                                                                                                                                                                                                                                             Isogai T, Sugiyama T, Otsuki T, Wakamatsu A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-MAR-2002; 2002EP-00006586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-MAR-2003
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(REAS-) RES ASSOC BIOTECHNOLOGY.
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| MKYHVM 184
                                                                         ΑA;
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Hio Y, Otsuka K, Nagai K, Irie R,
Otsuka M, Nagahari K, Masuho Y;
              0; Mismatches
                          Score 34; DB 6;
Pred. No. 38;
            0;
                                        Length 567;
              Indels
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            0;
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            Gaps
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       δ
1 MKYHVM 6
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212 MKYHVM 217
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Search completed: September 29, 2005, 12:31:11 Job time: 80.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments) 21.672 Million cell updates/sec

Title: Perfect score: US-10-774-147B-31 34

Sequence: 1 MKYHVM 6

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 513545 seqs, 74649064 residues

513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No:	Score	Query Match	Query Match Length DB		ID	Description
1	31	91.2	331	4	US-09-344-882-6	Sequence 6, App
2	31	91.2	406	ω	US-09-108-020-4	Sequence 4, App
ω	31	91.2	406	ω	US-09-108-020-42	Sequence 42, Apr
4	31	91.2	406	4	US-09-344-882-14	Sequence 14, App
ហ	31	91.2	406	4	US-09-685-296-4	Sequence 4, App
0	31	91.2	406	4	US-09-685-296-42	Sequence 42, Apr
7	30	88.2	212	N	US-08-477-396A-2	Sequence 2, Appl
œ	30	88.2	777	2	US-08-477-396A-4	Sequence 4, Appli
9	30	88.2	779	-	US-08-426-627-4	Sequence 4, Appl
10	30	88.2	779	┙	US-08-426-627-24	Sequence 24, Apr
11	30	88.2	779	4	US-09-461-912A-39	Sequence 39, Apr

. 45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	28	28	28	28	28	29	29	29	29	29	29	30	30	30	30
76.5					76.5	•	76.5	.6	76.5	9.	79.4	79.4	79.4	79.4	79.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	85.3	85.3	85.3	•	85.3	85.3	88.2		88.2	Θ.
187	183	153	128	128	128	128	124	73	63	582	582	578	414	411	313	4872	4866	586	466	444	442	254	75	634	527	527	128	128	111	837	836	811	811
4	4	4	ω	ω	N	N	4	4	4	۳	۲	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	ω	N	4	-	-	-	_
US-09-540-236-3818	US-09-902-540-13343	US-09-732-210-1748	US-09-212-149-4	US-09-212-149-3	US-08-928-926A-4	US-08-928-926A-3	US-09-732-210-1149	US-09-248-796A-26927	US-09-248-796A-23083	US-08-261-086-6	US-08-261-086-4	US-09-690-942-10	US-09-328-352-5504	US-09-690-942-12	US-09-248-796A-18880	US-09-424-783-3	US-09-424-783-2	US-09-270-767-44444	US-09-857-716-18	US-09-248-796A-19173	US-09-857-716-20	US-09-270-767-59881	US-09-513-999C-7121	US-09-385-219A-26	US-09-631-594-55	US-09-103-331-4	US-09-212-149-1	US-08-928-926A-1	US-09-513-999C-4963	US-08-426-627-23	US-08-426-627-6	8-426-627-	US-08-426-627-2
Sequence 3818, Ap	13343,	17,	Sequence 4, Appli	Sequence 3, Appli	4	Sequence 3, Appli	11,		23	6	4	Sequence 10, Appl	55C		Sequence 18880, A	Sequence 3, Appli			Sequence 18, Appl			59881,	7121	26,	55	4	1,		496		6, 2	22,	Sequence 2, Appli

Search completed: September 29, 2005, 12:42:01 Job time: 20.6667 secs

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OM protein - protein search, using sw model

September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Title: Perfect score: US-10-774-147B-31 34

Sequence: 1 MKYHVM 6

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Database :

Listing first 45 summaries Maximum Match 100%

Published_Applications_AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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SEQ ID NO 1483 LENGTH: 109 TYPE: PRT		ALI GNMENTS			
; FITOT ADDITION GAIN FEMOVEG - CONSU ; NUMBER OF SEQ ID NOS: 1792 ; SOFTWARE: Patentin Ver. 2.0	Sequence 12, Appl	14 US-10-217-371-12	88.2 771	30	45
CURRENT FILING DATE: 2001-01-17		17	o N	3 G	43
; CURRENT APPLICATION NUMBER: US/09/764,		17	N	30	42
; FILE REFERENCE: PTZ23		17		30	41
; APPLICANT: Rosen et al.	Sequence 14, Appl	14 US-10-217-371-4	88.2 751	30	40
; GENERAL INFORMATION:	4.	17		30	38
; Patent No. US20020132753A1	Sequence 6, Appli	14	88.2 730	30	37
US-09-764-864-1483	4.5	6 14 US-10-176-847-46	88.2 696	ب د د	ب م
RESULT 2	Sequence 446, App	16		30	34
	Sequence 872, App	15		30	33
LO 1 MRIHYM 6	Sequence 547, App	2 14 US-10-091-304-672	88.2 192	۵ د د	32
	Sequence 872, App			3 6	3 0
Qy 1 MKYHVM 6	Sequence 79, Appl	15		30	29
07	Sequence 78, Appl	15		30	28
Matches 6: Conservative 0. Mism	Sequence 2339, Ap	9 15 US-10-052-648A-30	88.2 188	30	29 27
100.0%;	Sequence 18, Appl	14		30	2 25
	Sequence 6, Appli	14		30	24
US-10-774-147B-31	Sequence 42750, A	9 ر	88.2 177	30	23
: OTHER INFORMATION: P20	Seguence 80, Appl	1 15 US-10-08/-88/-80	88.2 151	သ ပ	22
; NAME/KEY: Peptide	Sequence 205060,			3 0	20
; FEATURE:	Sequence 153066,	15		30	19
; OTHER INFORMATION: Synthetic	Sequence 204548,	16		31	18
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ORGANISM. Prtificial appropri	Sequence 14, Appr	6 15 US-10-425-114-54353	91.2 406	ب د د	
; LENGTH: 6	Sequence 14, Appl	. 6	3 N	. u	1 4
; SEQ ID NO 31	Sequence 242534,	15	~	31	13
; SOFTWARE: PatentIn version 3.3	Sequence 45410, A	16	2	31	12
NUMBER OF SEC ID NOS: 36	Sequence 190117.	16	N I	31	11
PRIOR FILING DATE: 2003-02-07	Sequence 257523.	16	91.2 383	31	10
CURRENT FILING DATE: ZUU4-0Z-05	Seguence 49338, A	6 16 135-10-423-14-49338 6 16 135-10-437-963-172422	91 2 376	<u>ب</u> د	ρa
; CURRENT APPLICATION NUMBER: US/10/774,	Sequence 6, Appli	14	3 K	ي د	o ~
; FILE REFERENCE: 10050-03USA	Sequence 6, Appli	9		: 2) O
; TITLE OF INVENTION: LEUKOCYTE STIMULAT	Sequence 67856, A	15		31	, cn
	Sequence 2907, Ap	15		34	4
	Sequence 1060, Ap	ø		34	ω
: APPLICANT: BAF, YOB-SIV	Sequence 1483. An	9 9 US-09-764-864-1483	100.0 109	ωų	N +
	Somoro 31 April	16		A.E.	-
; APPLICANT: POSTECH Foundation	Description	n DB ID	Match Length DB	Score	No.
; FUDITICATION NO. USZUU4UZ46Z33AI ; GENERAL INFORMATION:			Ouerv		Result
Ö		SUMMARIES	ρ		

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Sung-Ho
Yose-Sik Eun-Young
Pann-Ghill
N: LEUKOCYTE STIMULATING PEPTIDES
0050-03USA
ON NUMBER: US/10/774,147B
ON NUMBER: US 60/445,621
INUMBER: US 60/445,621
INUMBER: US 60/445,621
INUMBER: US 60/445,621
NUMBER: US/09/764,864
: 2001-01-17
:ata removed - consult PALM or file wrapper
:s: 1792
Ver. 2.0
                                                                           al.
Nucleic Acids, Proteins, and Antibodies
                                                                                                                                         cation US/09764864
2753A1
                                                                                                                                                                                                                                                                                               100.0%; Score 34; DB 16; Length 6; y 100.0%; Pred. No. 1.7e+06; rvative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                               P20
                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         al sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      version 3.3
                                                                                                                                                                                                                                                                                                 0;
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Gaps

0,

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; Sequence 2907, Application US/10094749; Publication No. US20030219741A1; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: YAMAMOTO, JUN-ICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NESULT 3
US-09-764-864-1060
; Sequence 1060, Application US/09764864
; Patent No. US20020132753A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-764-864-1060
                                                                                                                                                                                                                                                                                                         US-10-094-749-2907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper NUMBER.OF SEQ ID NOS: 1792
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1060
LENGTH: 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PTZ23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 34; DB 9; Length 366; Best Local Similarity 100.0%; Pred. No. 62;
                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                           11 MKYHVM 16
                                                                                                                                                                                                                                                                                                                                                                                                                  1 MKYHVM 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11 MKYHVM 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6; Conservative
SUGIYAMA, TOMOYASU
OTSUKI, TETSUJI
WAKAWATSU, AI
SATO, HIROVUKI
ISHII, SHIZUKO
YAWAWOTO, JUN-ICHI
ISONO, YUUKO
ISONO, YUUKO
OTSUKA, KAORU
NAGAI, KEIICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
```

0;

0

20

1 MKYHVM 6

; LOCATION: (100); OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids US-09-764-864-1483

Query Match 100.0%; Score 34; DB 9; Length 109; Best Local Similarity 100.0%; Pred. No. 19; Matches 6; Conservative 0; Mismatches 0; Indels

0;

0;

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

September 29, 2005, 12:13:23; Search time 14.5 Seconds (without alignments) 39.814 Million cell updates/sec

Title: US-10-774-147B-31
Perfect score: 34
Sequence: 1 MKYHVM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length DB	ength	DB	ID	Description
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ω	30	88.2	732	8	T19923	hypothetical prote
4	30	88.2	779	N	S36111	osteoblast-specifi
5	30	88.2	811	N	S36109	osteoblast-specifi
σ	30	88.2	836	2	S36110	osteoblast-specifi
7	30	88.2	1174	N	S57060	probable membrane
æ	29	85.3	61	2	C70245	hypothetical prote
9	29	85.3	243	N	H70227	antigen, P35 homol
10	29	85.3	319	N	T15463	hypothetical prote
11	29	85.3	332	N	C83933	penicillin-binding
12	29	85.3	451	N	G70241	hypothetical prote
13	29	85.3	491	N	S61715	clathrin-associate

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14
27 .	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29
79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	85.3	85.3
757	750	664	620	583	582	570	570	566	486	247	242	148	141	92	4872	4868	4859	1121	952	868	475	466	464	377	288	283	237	237	96	3110	1657
~	2	N	Ŋ	N	2	2	2	N	2	2	N	2	N	2	2	2	N	N	N	2	~	N	2	N	N	2	2	2	2	N	2
в90572	F90571	B75532	T19907	A45381	S29314	S54134	A39597	F71403	T39456	F69060	F84016	T23839	F71070	A97230	S27272	B54161	S74173	T25715	E84534	T25716	C96503	A81239	H82011	T27805	148743	D82659	B61230	C82002	S78638	AC0116	T25421
	lipoprotein [impor	cytochrome c-type		phytoene dehydroge	phytoene dehydroge	phytoene dehydroge	phytoene dehydroge	hypothetical prote	zinc finger protei	73				hypothetical prote	ryanodine receptor	ryanodine-binding			hypothetical prote	hypothetical prote		outer membrane pro	probable outer mem	hypothetical prote	ryanodine receptor	hypothetical prote	septum site-determ	probable cell divi	hypothetical prote	probable virulence	hypothetical prote

Search completed: September 29, 2005, 12:39:51 Job time : 15.5 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein protein search, using sw model

Run 95 September 29, 2005, 12:11:58; Search time 70 Seconds (Without alignments)
43.893 Million cell updates/sec

Title: Perfect score: US-10-774-147B-31 34

Sequence: 1 MKYHVM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database UniProt_03:*

uniprot_sprot: *
uniprot_trembl: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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31	31	31	31	31	31	31	31	31	34	34	34	34	34	34	Score	
91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	100.0	100.0	100.0	100.0	100.0	100.0	Query	ø
1033	635	457	406	406	406	406	287	286	591	567	565	562	490	204	Length	
2	2	2	2	٧	N	N	N	N	N		2	N	N	N	B	
060964	Q82U81	Q8VYS9	Q9C6Z3	Q8LAI3	064688	024458	065087	Q9FKH7	Q69Z99	Z512_HUMAN	Q95JV5	Q8BJF3	Q86XK6	Q6AXW7	ID	
Q6q964 oryctolagus	Q82u81 nitrosomona	Q8vys9 arabidopsis	Q9c6z3 arabidopsis	Q81ai3 arabidopsis	064688 arabidopsis	024458 arabidopsis	065087 picea maria	Q9fkh7 arabidopsis	Q69z99 mus musculu	Q96me7 homo sapien	Q95jv5 macaca fasc	Q8bjf3 mus musculu	Q86xk6 homo sapien	Q6axw7 rattus norv	Description	

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
29	29		29		29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31
85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	•	•	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	91.2	91.2
332	317	289	243	177	162	127	120	115	104	61	1869	1174	936	838	836	810	732	428	428	428	217	215	188	188	137	98	58	3619	1094
N	N	N	N		~	_	N	N	N	N	N	-	N	_		N	N	Ŋ	N	N	2	N	N		N	N	N	N	-
Q9КАМО	Q7N3M4	Q17846	050725	YP98_CAEEL	Q881N8	NB7M_HUMAN	Q7Y4N7	Q7PSJ5	Q6BN60	050758	Q6LF66	YJ11_YEAST	Q6BH21	POSN_MOUSE	POSN_HUMAN	Q6GUA3	Q27480	Q7CF94	Q9A0F6	Q8P1I1	Q6L2U9	Q8HZM3	Q8VE01	DUSI_HUMAN	Q8BWD7	Q6PKZ1	Q7P892	Q9U573	ATHL_RABIT
Q9kam0 bacillus ha	Q7n3m4 photorhabdu		050725 borrelia bu	Q09246 caenorhabdi	Q881n8 pseudomonas	095139 homo sapien	bacterioph	Q7psj5 anopheles g	Q6bn60 debaryomyce	050758 borrelia bu	Q6lf66 plasmodium	P47108 saccharomyc	Q6bh21 debaryomyce	Q62009 mus musculu		Q6gua3 mus musculu		Q7cf94 streptococc	٠.	Q8plil streptococc	Q612u9 picrophilus	Q8hzm3 bos taurus		Q8nej0 homo sapien	-	Q6pkzl oryctolagus	Q7p892 fusobacteri	Q9u573 dictyosteli	Q9tv52 oryctolagus

ALI GNMENTS

RESULT 1 Q6AXW7 ID Q6AY AC Q6AY DT 25-7 DT 25-7 DT 25-7 DT 25-7 C Ev OC Ra OC M RN RN RN RA RA RA RA RA PISSUE=Testis; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Strausberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schaetz T.E., Q6AXW7; 25-OCT-2004 (TrEMBLrel. 28, 25-OCT-2004 (TrEMBLrel. 28, 25-OCT-2004 (TrEMBLrel. 28, Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus. NCBI_TaxID=10116; Hypothetical protein. Rattus norvegicus (Rat). Q6AXW7 SEQUENCE FROM N.A. PRELIMINARY; Last sequence update) Last annotation update) Created) PRT; 204 AA.

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RESULT QB6XK6 ID QB6XK6 OX QC PF RX
                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 34; DB 2; Length 204; Best Local Similarity 100.0%; Pred. No. 20;
                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                        Q86XK6;
01-JUN-2003 (TrEMBLrel. 24,
01-JUN-2003 (TrEMBLrel. 24,
01-OCT-2003 (TrEMBLrel. 25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (AUG-2004) to the EMBL/GenBank/DDBJ databases.

EMBL; BC079285; AAF79285.1; -.

GO: GO:0006138; F:protein tyrosine/serine/threonine phosphata. .; IEA.

GO: GO:0006470; P:protein amino acid dephosphorylation; IEA.

InterPro; IPR000340; DS phosphatase.

InterPro; IPR000387; TYR phosphatase.

Pfam; PF00782; DSPc; 1.

SMART; SM00195; DSPc; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00383; TYR_PHOSPHATASE_1; 1.
PROSITE; PS30056; TYR_PHOSPHATASE_2; 1.
PROSITE; PS50054; TYR_PHOSPHATASE_DUAL; 1.
Hydrolase; Hypothetical protein.
TISSUE=Testis;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                     Homo sapiens (Human)
                                                                                                                                                       ZNF512 protein.
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                                           SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and mouse cDNA sequences.";
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                                                                                                  Primates; Catarrhini; Hominidae; Homo.
                                                                                                                 Chordata; Craniata; Vertebrata; Euteleostomi;
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RA Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.J., Wang J., Hsiah F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.J., Wang J., Hsiah F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Kichards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Mazny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Fahey J., Madan A., Young A.C., Shevchenko Y. Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marva M. A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
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                                           01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Mus musculus 12 days embryo eyeball cDNA, RIKEN full-length enriched
library, clone:D230008H22 product:hypothetical Zinc finger, C2H2 type
containing protein, full insert sequence.
                                                                                                                                            Q8BJF3;
01-MAR-2003 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
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SMART; SM00355; ZNF CZH2; 4.

PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.

PROSITE; PS50157; ZINC_FINGER_C2H2_2; 2.

SEQUENCE 490 AA; 56362 MW; E42ZZA04CBAD1411 CRC64;
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60; GC:0005634; C:nucleus; IEA.
GO; GC:0003676; F:nucleic ecid binding; IEA.
GO; GC:0008270; F:zinc ion binding; IEA.
InterPro; IPR007087; Znf_C2H2.
                                                                                                                                                                                                                             Q8BJF3
                            Name=Zfp512;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        h 100.0%; Score 34; DB 2; Length 490; Similarity 100.0%; Pred. No. 49;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                           562 AA.
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Mus musculus

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MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600; Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Konno H., Akiyama J., Nishi K., Kiteunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Varaki Y., Muramateu M., Inoue Y., Kira A., Hayashizaki Y.; "RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer.";
STRAIN-C57BL/6J; TISSUE-Eyeball;
Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
Adachi J., Furuno M., Hanagaki T., Hara A., Hashizume W.,
Fukuda S., Furuno M., Hiramoto K., Hiraoka T., Hirozane T.,
Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Kasukawa T.,
Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
Katoh H., Kawai J., Kojiana Y., Kondo S., Konno H., Kouda M., Koya S.,
Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-C57BL/6J; TISSUE-Eyeball; MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100; MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100; Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M., Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.; "Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes."; Genome Res. 10:1617-1630(2000).
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STRAIN=C57BL/6J; TISSUE=Eyeball;
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the RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=C57BL/6J; TISSUE=Eyeball;
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                       Genome Res. 10:1757-1771(2000).
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Rodentia;
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                                                            Osada N., Hida M., Kusuda J., Tanuma R., Hirata M., Suto Y., Hirai M., Terao K., Sugano S., Hashimoto K.;
"Cymomolyus monkey testicular cDNAs for discovery of novel human genes in the human genome sequence.";
BMC Genomics 3:36-36(2002).
EMBL; AB070073; BAB63018.1; -.
GO; GO:0003676; F:nucleus; IEA.
GO; GO:0003676; F:nucleus acid binding; IEA.
GO; GO:000870; F:zinc ion binding; IEA.
                                                                                                                                                                                                                                                                                                                                                    Q95JV5;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                         Q95JV5
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GO; GO:0003676; F:nucleic acid binding; IEA.
GO; GO:0008270; F:zinc ion binding; IEA.
InterPro; IPRO07087; Znf_C2H2.
Pfam; Pf00096; zf-C2H2; 2.
SMART; SM00355; Znf_C2H2; 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y., Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H., Sasaki D., Sahota K., Shinagawa A., Shiraki T., Sogabo Y., Tagami M., Tagama A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T., Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                     Hypothetical protein.
Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                Pfam; PF00096; zf-C2H2; 3. SMART; SM00355; ZnF_C2H2;
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                                                                                                                                                                                                                TISSUE=Testis;
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                                                                                                                                                                                                                                                          NCBI_TaxID=9541;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hypothetical protein. SEQUENCE 562 AA; 6
PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.
                                                 InterPro; IPR007087; Znf_C2H2.
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                  C2H2; 4
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A Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S.,
A Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S.,
A Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Wagatsuma M.,
A Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M.,
A Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M.,
A Nakahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E.,
A Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M.,
A Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K.,
A Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K.,
A Yamazaki M., Ninomiya K., Ishibashi T., Yamashita M., Hara H., Tanase T.-O.,
A Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T.,
A Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O.,
A Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M.,
A Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S.,
Yoshikawa Y., Metsunawa H., Ichihara T., Shibata N., Sano S.,
A Yoshikawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H.,
Hishigaki H., Watanabe T., Sugiyama A., Takamoto M., Kawakami Y. B.,
Yamazaki M., Matanabe T., Sugiyama A., Takamoto M., Kawakami Y. B.,
Yamazaki M., Matanabe T., Kunada A., Takamoto M., Kawakami Y. B.,
Yamazaki M., Matanabe T., Kunada A., Takamoto M., Kawakami Y. B.,
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                                                                                                                                                                  Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujimara T., Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y., Okamoto S., Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAR-2004 (Rel. 43, Created)
29-MAR-2004 (Rel. 43, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Mizushima-Sugano J., Satch T., Shirai Y., Takahashi Y., Nakagawa K., Mizushima-Sugano J., Namura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=14702039; DOI=10.1038/ng1285;
Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=ZNF512; Synonyms=KIAA1805;
Homo sapiens (Human).
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SEQUENCE 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q96JM0;
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565 AA; 6
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25-OCT-2004 (TrEMBLrel. 25-OCT-2004 (TrEMBLrel.
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"Prediction of the coding sequences of unidentified human genes. XX
The complete sequences of 100 new cDNA clones from brain which code
                                                           269299;
                                                                                       969299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genew; HGNC:29380; ZNF512.
InterPro; IPR007087; Znf_C2H2.
Pfam; PF00096; zf-C2H2; 4.
SMART; SM00355; Znf_C2H2; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Complete sequencing and characterization of 21,243 full-length human cDNAs.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Transcription regulation;
ZN_FING 197 220
ZN_FING 287 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.
PROSITE; PS50157; ZINC_FINGER_C2H2_2; 2.
DNA-binding; Metal-binding; Nuclear protein; Repeat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AK057028; BAB71348.1; -. EMBL; AB058708; BAB47434.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or agnd an email to license/it-i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SIMILARITY: Contains 4 C2H2-type zinc fingers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- FUNCTION: May be involved in transcriptional regulation.
-!- SUBCELLULAR LOCATION: Nuclear (Potential).
-!- SIMILARITY: Belongs to the krueppel C2H2-type zinc-finger protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for large proteins in vitro."; DNA Res. 8:85-95(2001).
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440
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28, Created)
28, Last seq
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C2H2-type 4.
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Pred. No. 56;
                                                                                    PRT;
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Last sequence update)

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RP SEQUENCE FROM N.A.

RC TISSUE=Embryonic intestinal tract;

RA Okazaki N., Kikuno R.F., Ohara R., Inamoto S., Koseki H., Hiraoka S.,

RA Asga Y., Seino S., Nishimura M., Kaisho T., Hoshino K., Kitamura H.,

RA Asgase T., Ohara O., Koga H.;

RT "Prediction of the Coding Sequences of Mouse Homologues of KIAA Gene:

RT IV. The Complete Nucleotide Sequences of 500 Mouse KIAA-Homologous

RT CDNAs Identified by Screening of Terminal Sequences of cDNA Clones

RRT CDNAs Identified by Screening of Terminal Sequences of cDNA Clones

RR Randomly Sampled from Size-Fractionated Libraries.";

DNA Res. 11:205-218(2004).

RC CO:00005634; C:nucleus; IEA.

DR GO; GO:00005634; C:nucleus; IEA.

DR GO; GO:00005634; C:nucleus; IEA.

DR GO; GO:0000570; F:zinc ion binding; IEA.

DR GO; GO:0000576; F:zinc ion binding; IEA.

InterPro, IPR007087; Znf C2H2.

DR Pfam, PP00905; Znf C2H2; 5.

DR PROSITE; PS00028; ZNF C2H2.; 3.

PROSITE; PS00028; ZNF C2H2.; 3.

PROSITE; PS00028; ZNF C2H2.; 2.

PROSITE; PS00028; ZNF C2H2.; 3.

PROSITE; PS00028; ZNF C2H2.; 3.

PROSITE; PS00028; ZNF C2H2.; 3.

PROSITE; PS00028; ZNF C3H2 MW; 9CD0D48D33814EAE CRC64;
                                                                                                                                                   Query Match 100.0%; Score 34; DB 2; Length 591; Best Local Similarity 100.0%; Pred. No. 59; Matches 6; Conservative 0; Mismatches 0; Indels
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-OCT-2004 (TrEMBLrel. 28, Last annotation update) MKIAA1805 protein (Fragment). Name=mKIAA1805;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10090; [1]
244 MKYHVM 249
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Search completed: September 29, 2005, 12:38:17 Job time : 70 secs

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GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

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OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Sequence: Title: Perfect score: US-10-774-147B-32 34 1 МКҮҮКМ 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2003bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Query Match Length DB	88	t Query Match Length DB ID	Description
۲ ٔ	34	100.0	0	œ	ADR44751	Adr44751 Human leu
2	31	91.2	5825	ω	ADN17340	Adn17340 V. faba e
ω	30	88.2	1245	ω	AAB18244	Aab18244 Plasmodiu
4	30	88.2	2435	4	ABB60448	Abb60448 Drosophil
G	29	85.3	0	œ	ADR44739	Adr44739 Human leu
6	29	85.3	6	œ	ADR44745	Adr44745 Human leu
7	29	85.3	6	в	ADR44749	Adr44749 Human leu
8	29	85.3	45	N	AAY14039	Aay14039 Repeat se
9	29	85.3	46	σ	ABR83863	Abr83863 Bacillus

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
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390	390	390	390	390	379	372	371	359	328	314	110	70	6	2295	1228	981	844	844	584	469	432	401	398	397	397	397	397	397	397	397	397	361	220	80	46
7	7	7	7	7	œ	σ	œ	ω	œ	თ	ω	в	œ	ω	0	8	в	8	8	æ	2	თ	σ	æ	4	42	ω	ω	N	2	2	œ	2	U	7
ADJ68663	ADD44983	ADD44987	ADD44985	ADD44981	ABM84449	ABUS 4644	ABM84450	ADL90227	ABM84451	ABB47431	AAB44118	ADL04940	ADR44752	AAB18180	ABU43845	ADK52114	ADI 40973	ADI41017	ADS24442	ADP99149	AAY08219	ABB93450	ABU23701	ADP49177	AAE01139	AAE01140	AAB29598	AAB29597	AAY06512	AAW7 6437	AAW04217	ADK1 6799	AAY31800	ADH32511	ADF69890
Adj68663 Human hea	Add44983 Human Pro	Add44987 Human Pro	Add44985 Rat Prote	Add44981 Rat Prote		Abu54644 Human NOV	Abm84450 Human dia	Ad190227 Human enz	Abm84451 Human dia		Aab44118 Human can	Adl04940 M. catarr		Aab18180 Plasmodiu	Abu43845 Protein e	Adk52114 Human ato	Adi40973 Goldfish		Ads24442 Bacterial		Aay08219 Staphyloc	0	1 Protei	7	Ase01139 Human pur	Aae01140 Rat purin	Aab29598 Rat P2X-3	Aab29597 Human P2X	Aay06512 Human P2X	Aaw76437 Human p53	Aaw04217 Rat dorsa	Adk16799 Nanoarcha	Aay31800 Beak and		Adf69890 AcmA-type

ALI CHMENTS

os x &	KW W	₹.	X DE	×	Ŋ	×	ΑĊ	×	ID	ADR44751	1538
leukocyte stimulating peptide; human. Homo sapiens.	acquired immune deficiency syndrome; AIDS; cancer; gene therapy;	Arachidonic acid release; AA release; intracellular calcium release;	Human leukocyte stimulating peptide, P21.		04-NOV-2004 (first entry)		ADR44751;		ADR44751 standard; peptide; 6 AA.	14751	RECIT 1

밁 Search completed: September 29, 2005, 12:31:12 Job time: 81.6667 secs Ş Matches Query Match Best Local S The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune Sequence 6 AA; diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the Claim 1; SEQ ID NO 32; 57pp; English. Ryu S, 07-FEB-2003; 2003US-0455621P. 06-FEB-2004; 2004WO-KR000225. Key Modified-site response to bacteria. WPI; 2004-604410/58. 19-AUG-2004. WO2004069858-A2. invention. (POSC-) POSCO. (POST-) POSTECH FOUND. Local Similarity 1 MKYYKM 6 Bae Y, Park E, IN 100.0%; Score 34; DB 8; Length 6; Similarity 100.0%; Pred. No. 1.8e+06; 6; Conservative 0; Mismatches ^ . . . MKYYKM 6 0 Location/Qualifiers /note= "C-terminal amide" Suh φ, 0; Gaps

```
0;
 Result
                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein -
Query
                                                                                                                                                                                                                              Listing first 45 summaries
                                                                                                                                                                                                                                             Maximum Match 100%
```

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protein search, using sw model

September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments) 21.672 Million cell updates/sec

US-10-774-147B-32 34

1 МКҮҮКМ 6

BLOSUM62 Gapop 10.0 , Gapext 0.5

513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Issued_Patents_AA:*

/cgn2_6/ptodata/1/iaa/5A_COMB.pep: *
/cgn2_6/ptodata/1/iaa/5B_COMB.pep: *
/cgn2_6/ptodata/1/iaa/6A_COMB.pep: *
/cgn2_6/ptodata/1/iaa/6A_COMB.pep: *
/cgn2_6/ptodata/1/iaa/BCCTUS_COMB.pep: *
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

1 20	Score	Match	Match Length DB ID	: B	ID	Description
	29	85.3	202	-	US-08-155-171B-21	Sequence 21,
N	29	85.3	202	N	US-08-435-998-21	Sequence
ω	29	85.3	220	ω	US-09-267-177-8	
4	29	85.3	397	N	US-08-750-134A-9	
G	29	85.3	397	ω	US-09-363-745-9	
6	29	85.3	397	w	US-09-191-136-16	
7	29	85.3	397	ω	US-09-191-136-17	
æ	29	85.3	397	4	US-09-949-016-6237	
9	28	82.4	70	4	US-09-540-236-2626	
10	28	82.4	378	4	US-09-248-796A-15294	
11	28	82.4	390	ω	US-09-108-020-36	Sequence 36, Appl

45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28
76.5	76.5	٥.	σ,		. 76.5	76.5	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	82.4	82.4	82.4	82.4	82.4	82.4
116	88	78	29	29	29	æ	3959	3959	2987	2987	360	229	158	156	156	156	156	156	127	93	93	80	80	80	80	80	78	582	414	397	390	390	390
4	4	4	ω	ω	ω	ហ	ω	N	ω	N	4	4	w	4	ω	ω	ω	N	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
US-09-248-796A-17095	US-09-513-999C-7631	US-09-732-210-341	US-08-942-046-41	US-09-135-166-41	US-08-433-522A-41	PCT-US95-02140-1	US-09-407-562-30	US-08-970-269A-30	US-09-407-562-29	US-08-970-269A-29	US-09-501-115-4	US-09-248-796A-19846	US-09-091-725-25	US-09-665-479A-10	US-09-357-746-7	US-09-051-969A-4	US-09-051-969A-3	US-09-070-060-7	US-09-270-767-42359	US-09-732-210-340	US-09-732-210-339	US-09-854-133-32	US-09-732-210-353	US-09-732-210-344	US-09-732-210-342	US-09-370-838-32	US-09-732-210-351	US-09-902-540-11161	US-09-901-151-4	US-09-901-151-2	US-09-685-296-36	US-09-901-151-6	US-09-901-151-5
Sequence 17095, A	7631,	341,	Sequence 41, Appl	41,	41,	1, 7	30,	30,	29,	29		1984	25,	10,	7,	4	Sequence 3, Appli		42359	340,	339,	32, 1	353,	344,	342,	32,	Sequence 351, App	111	4,	Sequence 2, Appli	36,	6	Sequence 5, Appli

Search completed: September 29, 2005, 12:42:02 Job time : 21.6667 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Perfect score: Title: US-10-774-147B-32 34 1 MKYYKM 6

BLOSUM62

Scoring table: Gapop 10.0 , Gapext 0.5

1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters:

1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Published Applications AA:

(cgn2_6/prodata/1/pubpaa/USO7_PUBCOMB.pep:*

(cgn2_6/prodata/1/pubpaa/USO6_NEW_PUB.pep:*

(cgn2_6/prodata/1/pubpaa/USO6_NEW_PUB.pep:*

(cgn2_6/prodata/1/pubpaa/USO6_PUBCOMB.pep:*

(cgn2_6/prodata/1/pubpaa/USO6_PUBCOMB.pep:*

(cgn2_6/prodata/1/pubpaa/USO8_NEW_PUB.pep:*

(cgn2_6/prodata/1/pubpaa/USO8_PUBCOMB.pep:*

(cgn2_6/prodata/1/pubpaa/USO9_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

45	44		42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	g	œ	7	0	Çī.	4	ω	2		1 20.	Kesute	1
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29			29				29		30		34	900016	7	
82.4	82.4				2	82.4	82.4	82.4	82.4	82.4	82.4	82.4			82.4	82.4	82.4	85.3	85.3	85.3	85.3	85.3	5	Ģ	•	5	•	٠	٠		85.3		•	5	5	85.3	5		85.3	85.3	5	88.2	1.	0	maten)
414	414	397	397	9	390	390	390	390	390	390	390	388	372	319	111	110	6	6761	1573	1228	849	844	844	737	713	584	415	414	396	397	349	349	206	205	80	46	46	45	6	σ	6	2435	75	o	Lengen		
15	9	15	9	18	18	16	16	15	15	9	9	18	15	16	17	9	16	17	16	15	16	15	15	16	17	15	18	15	15	16	17	17	17	15	14	14	14	18	16	16	16	20	16	16	6	ם מ	
5	US-09-901-151-4	US-10-611-945-2	9-901	10-972-963-	10-972-963-68	10-723-860-153	US-10-408-765A-469	US-10-611-945-6	US-10-611-945-5	US-09-901-151-6	US-09-901-151-5	US-10-972-963-70	270-	US-10-437-963-173743	US-10-732-923-9565	US-09-925-301-1563	US-10-774-147B-33	US-10-732-923-15035	-437-963-1	1	9	US-10-436-715-77	US-10-436-715-33	US-10-437-963-179357	US-10-732-923-23288	US-10-369-493-13475	Ļ	0-424-599-24	US-10-282-122A-51625	-10-817-607-7	US-10-732-923-22784	227	-10-732-923-8422	-10-424-599-	-10-083-35	-10-318-	10-	-10-654-	-10-	US-10-774-147B-26	US-10-774-147B-20	US-11-097-143-8136	US-10-425-115-235802	US-10-774-147B-32	E		
e 4,	4	e 2,	2	e 113,	e 68, A		469	6	φ 5	6,	Sequence 5, Appli	Sequence 70, Appl		173743	e 9565,	1563,	33, App	15035,			1712	77,	е 33, Ap	17935	Ф	1347	49,	24361	e 516		22784	22783,		21269	969,	155,	155,	104,	30,	26,		813	2356	Sequence 32, Appl	pescription	7) 11 11 11 11 11 11 11 11 11 11 11 11 11	

ALIGNMENTS

RESULT 1 US-10-774-147B-32

```
Sequence 32, Application US/10774147B

Publication No. US20040248255A1

GERRAL INFORMATION:

APPLICANT: POSTECH Foundation
APPLICANT: POSTECH FOUNDATER:

APPLICANT: RVI, Sung-Ho
APPLICANT: RVI, Sung-Ho
APPLICANT: SUN, Pann-Ghill

APPLICANT: SUN,
```

0;

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OM protein - protein search, using sw model

September 29, 2005, 12:13:23; Search time 14.5 Seconds (Without alignments)
39.814 Million cell updates/sec

Title: Perfect score: Sequence: US-10-774-147B-32

1 МКҮҮКМ 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	% Query Match	% Query Match Length DB	DB	ID	Description
1	31	91.2	515	N	B90324	hypothetical prote
N	31	91.2	5825	N	T12117	polyprotein - fava
ω	30	88.2	579	N	нвв632	protein F56B3.7 [i
4	30	88.2	969	2	S17909	hypothetical prote
5	30	88.2	1197	N	S26947	DNA-directed DNA p
0	30	88.2	1245	N	D71613	GAF domain protein
7	29	85.3	133	N	в97270	CBS domain contain
ω	29	85.3	201	N	T28272	ORF MSV111 hypothe
9	29	85.3	202	2	S11434	proteinase - bovin
10	29	85.3	240	N	н69932	hypothetical prote
11	29	85.3	391	N	G90253	formate hydrogenly
12	29	85.3	397	N	S60334	purinoceptor P2X -
13	29	85.3	397	N	158099	gene P2X3 protein

ubiquitin / riboso	A48766	N	163	79.4	27	5
ubiquitin-like pro	B48766	N	163	79.4	27	14
_	UQFFR7	_	156	79.4	27	3
\	UQHUR7	_	156	79.4	27	12
ubiquitin / riboso	I52328	_	156	79.4	27	=
hypothetical prote	H90774	~	155	79.4	27	0
ubiquitin/S27a fus	T46664	N	154	79.4	27	39
	T39061	N	150	79.4	27	88
ubiquitin / riboso	UQNCR	-	149	79.4	27	37
mercuric resistanc	F96956	2	132	79.4	27	8
×	A49103	~	81	79.4	27	35
ubiquitin / riboso	B40186	~	32	79.4	27	34
	A97306		1077	82.4	28	ຜ
probable iron-upta	E81435	N	538	82.4	28	2
F16G16.8 [imported	F96674	N	525	82.4	28	22
site-specific DNA-	AC1923	N	477	82.4	28	ŏ
	S23506	2	390	82.4	28	9
	DERTPA	_	390	82.4	28	86
	DERTP1	-	390	82.4	28	27
	DEHUPA	1	390	82.4	28	9
pyruvate dehydroge	DEPGPA	_	389	82.4	28	35
pyruvate dehydroge	DEHUPT	_	388	82.4	28	24
B. subtilis YqfA p	AC1484	N	314	82.4	28	23
B. subtilis YqfA p	AI1123	N	314	82.4	28	22
	C75190	N	290	82.4	28	11
	B71621	N	2295	5	29	õ
	S40766	N	1232	5	29	9
hypothetical prote	T23893	N	745	85.3	29	8
	T06632	N	809	85.3	29	.7
protein F47D12.9 (B88479	N	545	85.3	29	9
protein kinase-lik	T48576	2	401		29	5
glycosyltransferas	B97341	N	398	85.3	29	4

Search completed: September 29, 2005, 12:39:51 Job time : $14.5 \ \text{secs}$

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OM protein - protein search, using sw model

September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments) 43.893 Million cell updates/sec

Title: Perfect score: US-10-774-147B-32 34

Sequence: 1 MKYYKM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters: 1612378

1612378 seqs, 512079187 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

15	14	13	12	11	10	9	æ	7	σ	5	4	ω	N	1	Result
30	30	30	30	30	30	31	31	31	31	31	31	31	31	34	Score
88.2	88.2	88.2	88.2	88.2	88.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	100.0	Query Match
541	465	391	180	127	42	5825	515	377	170	129	37	37	37	72	Length DB
N	N	2	N	N	N	N	N	2	N	2	N	Ν	N	2	BB
045109	Q6GUC6	Q7VQQ2	Q832U8	Q9LW79	Q8HEI5	082731	Q97XS3	Q6FKN1	Q7RC52	Q7Y3Q4	Q74NW2	Q6F013	Q8KYT5	Q6EB84	ID
045109 caenorhabdi	Q6guc6 edwardsiell	Q7vqq2 candidatus	Q832u8 enterococcu	Q91w79 arabidopsis	Q8hei5 varroa dest	082731 vicia faba	Q97xs3 sulfolobus	Q6fknl candida gla	Q7rc52 plasmodium	Q7y3q4 enterobacte	Q74nw2 bacillus ce	Q6f013 bacillus an	Q8kyt5 bacillus an	Q6eb84 campylobact	Description

45	44	43	42	41	40	39	38	37	36	35	34	ယ	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29							30	
85.3	85.3	•	5	85.3	85.3		•	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	88.2	88.2	88.2	
289	289	289	288	288	288	259	240	235	204	202	201	199	184	184	184	184	184	184	184	146	133	120		51	51	2893	1245	969	793
2	N	N	N	N	N	2	_	2	N	<u>, , , , , , , , , , , , , , , , , , , </u>	Ν	N	2	N	N	N	N	N	2	N	2	2	2	2	2	N	N	_	2
Q68SY4	Q685Y2	Q4889Q	Q64IG4	Q685X3	Q68SX2	Q65HZ7	YPBE_BACSU	Q7PD30	Q8XJT7	ADEN_ADEB7	Q9YVY1	Q70AP2	Q80KZ2	Q80KZ1	Q80KZ0	Q80KY9	Q80KY8	Q80KY7	Q80KX6	Q6WGG2	Q97EU8	Q9IAB8	Q9IAB7	Q6VPA0	Q6VP90	Q9W433	096195	DPOM_NEUIN	Q86H92
Q68sy4 beak and fe	Q68sy2 beak and fe	beak and	and	Q68sx3 beak and fe	Q68sx2 beak and fe		bacillus s		Q8xjt7 clostridium		Q9yvy1 melanoplus		Q80kz2 beak and fe	Q80kz1 beak and fe	Q80kz0 beak and fe	beak and	beak	beak and		Q6wgg2 bovine aden	Q97eu8 clostridium				Q6vp90 camponotus	Q9w433 drosophila	096195 plasmodium		Q86h92 dictyosteli

ALI COMENTS

ΕŢ	묫	RL	RT	쫍	R.A	RX	RC	RP	R	×	00	000	S	Œ	Ŋ	Π	DŢ	AC	ID	Q6EB84	RESU
NON_TER 72 72	EMBL; AY501934; AAS99001.1;	J. Bacteriol. 186:4781-4795(2004).	Whole Microbial Genome Comparisons.";	"Identification of Campylobacter jejuni ATCC 43431-Specific Genes by	Poly F., Threadgill D., Stintzi A.;	PubMed=15231810; DOI=10.1128/JB.186.14.4781-4795.2004;	STRAIN=TGH 9011;	SEQUENCE FROM N.A.	[1]	NCBI_TaxID=197;	Campylobacteraceae; Campylobacter.	Bacteria; Proteobacteria; Epsilonproteobacteria; Campylobacterales;	Campylobacter jejuni.	Tgh045 (Fragment).	28,	25-OCT-2004 (TrEMBLrel. 28, Last sequence update)	25-OCT-2004 (TrEMBLrel. 28, Created)	Q6EB84;	Q6EB84 PRELIMINARY; PRT; 72 AA.	B84	RESULT 1
				•																	

SQ SEQUENCE 72 AA; 8601 MW; 74B8655C2DC04630 CRC64;

Query Match 100.0%; Score 34; DB 2; Length 72; Best Local Similarity 100.0%; Pred. No. 12; Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

δ 망 1 MKYYKM 6 |||||| 1 MKYYKM 6

Search completed: September 29, 2005, 12:38:17 Job time : 70 secs

ţ 4

OM protein - protein search, using sw model

99: September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Title: Perfect score: US-10-774-147B-33 36

Sequence: 1 МКҮҮРМ 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters: 2105692

2105692 seqs, 386760381 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

A_Genesaq_16Dec04:*
1: genesaqp190s:*
2: genesaqp190s:*
3: genesaqp2001s:*
4: genesaqp2001s:*
5: genesaqp2002s:*
6: genesaqp2003s:*
7: genesaqp2003bs:*
8: genesaqp2003bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result		Query Match		DB	ID	Description
11	36	100.0	6	8	8 ADR44752	Adr44752 Human leu
2	သ	91.7	262	ω	ADM98662	Adm98662 Geranylge
ω	33	91.7	262	ω	ADM98632	Adm98632 Geranylge
4	33	91.7	262	8	ADN17402	
σ	32	88.9	593	æ	ADS43852	Ads43852 Bacterial
6	31	86.1	6	œ	ADR44746	Adr44746 Human leu
7	31	86.1	თ	œ	ADR44740	
8	31	86.1	141	N	AAW28103	
9	31	86.1	330	v	AAW63590	ALL CORDS STREET IN

44 45	4 3 i	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
29 29	29	2 2	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	<u>1</u>	31	31	31	31	31	31	31	31	31
80.6		•	80.6	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
495 510	478	454	454	445	347	327	250	250	250	245	232	232	228	227	224	224	212	171	170	107	60	435	260	1194	440	439	439	439	439	435	425	425	330
Nω	ω (ν α	J	4	ω	ω	ω	8	7	7	0	4	0	6	Θ	ű	α	7	7	7	7	ω	N	σ	0	6	4	4	2	ω	œ	ω	Ν
ADN23982 AAR88360	ADN23912	ADS05587	ABP39593	AAG82882	ADN23670	ADN20106	ADS44522	ADI19379	ADG36926	AB077745	ABU15506	AAU33655	ABU41513	ABU40124	ADS29330	ABB54023	ADR08878	ADD27389	ADD27658	AD051596	ADF70002	ADN24236	AAW03520	ABU24346	ABM71279	ABU15917	AAU33979	AAU36756	AAW59995	ADS41859	ADJ50217	AAY43639	AAW59996
-	Adn23912 Bacterial							Аe				Aau33655 Pseudomon		Abu40124 Protein e			Human	Human	Human									σ	5		Adj50217 Oil-assoc	9 Amin	Aaw59996 Cell divi

ALI GNMENTS

So	×	Š	Ş	XX	Ş	×	DE	×	ΡŢ	×	AC	×	ID	RESU ADR
Homo sapiens.		leukocyte stimulating peptide; human.	acquired immune deficiency syndrome; AIDS;	immune response; pathogen; infectious dise	Arachidonic acid release; AA release; intra		Human leukocyte stimulating peptide, P22.		04-NOV-2004 (first entry)		ADR44752;		ADR44752 standard; peptide; 6 AA.	RESULT 1 ADR44752

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

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diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the
                                                                                              The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellar calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious
                                                                                                                                                                                                                                                      New leakocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune response to bacteria.
Sequence 6 AA;
                                                                                                                                                                                                                      Claim 1; SEQ ID NO 33; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-FEB-2003; 2003US-0455621P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-FEB-2004; 2004WO-KR000225.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
Modified-site
                                                                                                                                                                                                                                                                                                                                            WPI; 2004-604410/58.
                                                                                                                                                                                                                                                                                                                                                                            Ryu S, Bae Y, Park E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004069858-A2.
                                                                                                                                                                                                                                                                                                                                                                                                              (POST-) POSTECH FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                              Suh P;
                                                                                                    infectious
```

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문
                          Š
                                                            Query Match 100.0%; Score 36; DB 8; Length 6; Best Local Similarity 100.0%; Pred. No. 1.80+06; Matches 6; Conservative 0; Mismatches 0; Indels
                              1 МКҮҮРМ 6
 мкуурм 6
                                                                0;
                                                                Gaps
                                                                0
```

OM protein - protein search, using sw model

Run September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments) 21.672 Million cell updates/sec

Perfect score: US-10-774-147B-33 36 1 MKYYPM 6

Sequence:

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Listing first 45 summaries Maximum Match 100%

Database : Issued_Patents_AA: *

/cgn2_6/ptodata/1/iaa/5A_COMB.pep: /cgn2_6/ptodata/1/iaa/5B_COMB.pep: /cgn2_6/ptodata/1/iaa/6B_COMB.pep: /cgn2_6/ptodata/1/iaa/6B_COMB.pep: /cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep: /cgn2_6/ptodata/1/ /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

11	10	9	8	7	σ	ر. د	4	ω	~	1	Result No.
29	29	30	31	31	31	31	31	31	31	31	Score
80.6	80.6	83.3	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	Query Match
445	245	260	526	526	439	439	425	330	330	330	Query Match Length DB ID
4	4	_	2	_	ω	ω	4	ω	ω	2	BB
US-09-710-279-2858	US-09-252-991A-26491	US-08-595-559-1	US-08-493-754A-4	US-08-399-986B-4	US-09-411-763-2	US-08-921-209-2	US-09-293-549-6	US-09-411-763-4	US-08-921-209-4	US-08-827-615-2	ID
Sequence 2858, Ap	Sequence 26491, /	Sequence	Sequence 4, Appl	Sequence 4,	Sequence	Sequence 2,	Sequence 6,	Sequence 4,	Sequence 4,	Sequence 2,	Description
2858, Ap	26491, A	1, Appli	4, Appli	4, Appli	2, Appli	2, Appli	6, Appli	4, Appli		2, Appli	1 5 1 1 1

Search completed: September 29, 2005, 12:31:12 Job time: 80.6667 secs

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29
77.8	77.8	77.8	77.8	•	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8		77.8	•	77.8	•	77.8		77.8	77.8	•	•	•	80.6	80.6	ē	80.6
773	743	654	65 4	609	539	517	505	485	484	413	394	296	295	284	284	274	250	250	248	241	241	207	200	171	151	109	90	515	515	515	510	510	454
4	ω	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	ω	N	4	ω	4	ω	ω	ω	S	_	ω
US-09-949-016-11277	US-09-077-354B-2	US-09-949-016-8842	US-09-949-016-8841	US-09-248-796A-19292	9-248	US-09-248-796A-14652	US-09-270-767-43800	US-09-248-796A-18130	US-09-270-767-60873	US-09-489-039A-12692	US-09-949-016-7566	US-09-107-532A-6365	US-09-543-681A-6431	US-09-270-767-55474	US-09-270-767-40258	US-09-134-000C-4219	US-09-489-039A-8907	US-09-107-532A-4737	US-09-134-000C-5840	US-09-270-767-49906	US-09-270-767-34689	US-09-248-796A-19595	US-09-519-729-1	US-08-946-528-3	US-09-861-451A-76	134-001C-3	US-09-328-352-5812	US-08-434-831B-35	US-08-582-776C-38	US-08-369-822C-23	PCT-US95-06556-3	US-08-249-112-3	US-09-134-001C-4438
					Sequence			Sequence																						-			Sequence
11277, A		•	8841, Ap	19292, A	•	14652, A	•	18130, A	·	•	•	6365, Ap	•	55474, A	40258, A	•	8907, Ap	•	•	•	34689, A			3, Appli	⋧	14,	5812, Ap	5	ω,	23, Appl		끊	4438, Ap

Search completed: September 29, 2005, 12:42:02 Job time: 20.6667 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Perfect score: Title: US-10-774-147B-33 36

Sequence: 1 МКҮҮРМ 6

Scoring table: BLOSUM62

Searched: 1846076 seqs, 415116000 residues Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

```
Published_Applications_AA:

1: /cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:
2: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
4: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
4: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
5: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
6: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
7: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
8: /cgn2_6/ptodata/1/pubpaa/USO6_PUBCOMB.pep:
9: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
12: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
13: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
14: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
15: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
16: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
17: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
18: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
19: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
19: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
20: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
20: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
21: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
22: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
23: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
24: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
25: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

45	44	43	42	41	40	39	38	37	36	35	34	i.	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14		12	11	10	9	۵	7	O	ۍ	4	ω	8	1		No.	De : 1 t
29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31			31	31	31	31	31	31	31	31	31	32	32		33		36	ļ	Score	
80.6		٥.	0	٥.	0		80.6		80.6	0			83.	83.3	ω.	86.1	86.1	86.1	86.1	O.	86.1	86.1	o,	86.1	86.1	86.1	86.1	9	0	9	86.1	O.	σ	ō	σ	.0	٠	ō	в	88.9	91.7	91.7	91.7		1	Match	٦.
454	347	327	250	250	250	250	232	232	228	227	224	0/	435	188	70	1194	750	634	633	617	615	613	613	609	439	439	439	435	425	406	396	383	335	4	149	73	σ		593	593	262	262	262	6		Length	
18	15	15	20	17	15	15	15	9	15	5	15	16	5	16	15	15	16	15	15	17	17	16	13	17	15	9	φ	15		13	17			16	15	15	16	16	17	15	15	15	15	16	-	B	
-10-724-972A-48	-10-369-493-632	-10-369-	-11-084-394-6	•	-10-316-233-6	US-10-369-493-22952	US-10-282-122A-43430	US-09-815-242-5151	-282	-10-282-122A-6804	-10-369-493-18363	-10-425-	-10-369-493-6	-10-425-	-10-42	-10-282-	US-10-437-963-179251	US-10-425-114-63785	-10-425-114-	-10-732-923-	US-10-732-923-22855	US-10-437-963-179249	US-10-062-254-334	US-10-732-923-22866	US-10-282-122A-43841	815-242-	09-815-2	-10-369-493-	-10-389-566-2	-10	-10-732-923-2	-10-732-	-10-062-254-356	-10-425-	-10-425-114-4238	-10-424-599-1	-10-774-147B-	-10-774-147B-	-10-732-923-2014	-10-369-	US-10-041-018-82	US-10-041-018-52	US-10-369-493-55	-10-774-147B-		ID	
equence 4882,	equence 6323,	equence 275	equence 6,	e 214	e 6, Appl	e 22952	e 43430	Sequence 5151, Ap	Sequence 69437, A	Sequence 68048, A	18363,	Sequence 359868,	equence	equence 341266	Sequence 198903,	Sequence 52270, A	e 17925	e 63785	63811	22863	22855,	179249,	334, Ap	22866	e 4384	12349,	5475,	20289,	e 2221,	332, Ap	-	e 22885	356, A		42384,	1557	27,	21, Aç	2014, A	e 2228	•	Sequence 52, Appl	•	equence 3		Description	

Search completed: September 29, 2005, 12:49:48 Job time : 76.5 secs

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OM protein - protein search, using sw model

September 29, 2005, 12:13:23; Search time 14.5 Seconds (without alignments)
39.814 Million cell updates/sec

US-10-774-147B-33 36 1 MKYYPM 6

Title:
Perfect score:
Sequence:

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

13	12	11	10	9	8	7	6	Ç	4	ω	2	ш	Result
31	31	31	31	31	31	31	31	31	32	32	33	33	Score
86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	88.9	88.9	91.7	91.7	Query Match
1308	976	562	557	466	439	425	220	193	593	348	574		Query Match Length DB
2	2	N	N	N	N	_	2	N	2	2	2	2	8
T15280	E75212	C72278	E72282	H71234	C89890	S48469	T33592	D72367	S38145	T19885	C86400	E70365	ID
hypothetical prote	oligosaccharyl tra	hypothetical prote	oligopeptide ABC t	probable 4-aminobu	hypothetical prote	probable membrane	hypothetical prote	hypothetical prote	uroporphyrinogen m	hypothetical prote	hypothetical prote	geranylgeranyl pyr	Description

45	44	2	41	40	39	38	37	36	35	34	သ	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14
28	o a	200	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	31
	77.0	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	83.3	83.3	86.1
302	205	246	218	210	201	200	164	151	147	146	141	140	2116	1146	583	495	478	461	457	414	348	347	327	298	250	232	224	435	260	1444
N	υN	N	٨	N	2	N	2	N	N	N	N	N	-	2	N	2	N	N	8	2	N	2	_	N	N	N	N	N	Ν	-
A61193	T00725	AF1057	G71722	T48879	H90025	B75137	S48422	G90036	S21648	S21646	S21647	D27577	ZLVNSY	S07915	E83794	T20754	T24805	S50864	D90067	T22539	B97720	T29742	S76143	F69515	B72454	C83139	F86713	T19840	S71507	A43377
creatine kinase (E	protein Kuari, 1 [1		probable glutamine	proteasome psmB, b	molybdenum transpo	Ф	hypothetical prote	hypothetical prote	T-cell receptor al	T-cell receptor al	T-cell receptor al		genome polyprotein	RF2 protein - yeas			hypothetical prote	Ģ			hypothetical prote	hypothetical prote	probable aldehyde	hypothetical prote	probable thioredox	~		hypothetical prote	restriction endonu	RNA-directed RNA p

Search completed: September 29, 2005, 12:39:51 Job time: 14.5 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments) 43.893 Million cell updates/sec

Title:
Perfect score:
Sequence: US-10-774-147B-33 36

1 MKYYPM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters: 1612378

1612378 seqs, 512079187 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

UniProt_03:+
1: uniprot_sprot:+
2: uniprot_trembl:+

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

15	14	13	12	. 11	10	9	8	7	6	ر. د	4	ω	N	1	Result No.
31	31	31	31	31	31	31	32	32	32	32	32	33	33	33	Score
86.1	86.1	86.1	86.1	86.1	86.1	86.1	88.9	88.9	88.9	88.9	88.9	91.7	91.7	91.7	Query Match
335	273	259	220	214	210	193	593	524	364	237	145	574	273	262	Query Match Length DB
N	N	N	N	2	N	N	ب	2	2	N	2	2	N	_	B
007671	Q6C124	Q6E0T8	Q9TZA6	Q7RFU7	Q974J1	Q9WZ04	SUMT_YEAST	Q8UZJ2	017659	Q85BC3	Q6SFT0	Q9SXC9	Q6CHE9	ISPA_AQUAE	ID
	Q6c124 yarrowia li	Q6e0t8 borrelia he	Q9tza6 caenorhabdi	-	Q974jl sulfolobus	Q9wz04 thermotoga	P36150 saccharomyc	Q8uzj2 cercopithed		Q85bc3 dasyhelea s	Q6sft0 uncultured	Q9sxc9 arabidopsis	Q6che9 yarrowia li	066952 aquifex aec	Description

earch	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
earch completed: September 29.	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
d: Sept	83.3	83.3		83.3	83.3	83.3	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
ember 2	460	460	303	260	193	170	1444	1444	1308	1262	976	959	811	699	615	615	613	562	557	517	466	440	440	439	439	439	439	426	425	422
	N	N	N	N	N	N	-	-	N	N	N	N	N	8	N	N	N	N	N	N	N	N	N	N	N	N	N	N	_	2
2005. 12:38:17	Q7RKB3	Q18518	Q64W36	P71102	Q7RN94	Q6P4V6	RRPL_RDVF	RRPL_RDVA	001924	Q7XNL1	Q9V250	Q7QNT4	Q6TW71	Q7U5M5	Q63RF7	Q62162	Q65X38	Q9X0V3	Q9X0V0	Q7R3P5	057878	Q6GHQ1	Q6GA28	Q7A618	Q99UT0	Q8NX34	007324	Q75AZ9	YIK3_YEAST	Ø6CTC9
	Q7rkb3 plasmodium	Q18518 caenorhabdi	Q64w36 bacteroides	P71102 curtobacter	Q7rn94 plasmodium	Q6p4v6 brachydanio	Q98631 rice dwarf	Q02119 rice dwarf	001924 caenorhabdi	Q7xnll oryza sativ	_	Q7qnt4 giardia lam	Q6tw71 orf virus.	Q7u5m5 synechococc	Q63rf7 burkholderi	Q62i62 burkholderi		Q9x0v3 thermotoga		Q7r3p5 giardia lam			Q6ga28 staphylococ	Q7a618 staphylococ	Q99ut0 staphylococ	Q8nx34 staphylococ	007324 staphylococ	Q75az9 ashbya goss		Q6clc9 kluyveromyc

Search completed: September 29, 2005, 12:38:17 Job time : 70 secs

2

OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds
(without alignments)
28.767 Million cell updates/sec

Title: Perfect score: US-10-774-147B-34 33 1 MKYYVM 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2003bs:*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	Query Match Length DB	Length	BB	ID	Description
ם	33	100.0 6 8	6	ω	ADR44753	Adr44753 Human leu
8	30	90.9	121	6	ABM72061	Abm72061 Staphyloc
ω	29	87.9	457	G	ABP27386	Abp27386 Streptoco
4	29	87.9	462	σ	ABU44132	Abu44132 Protein e
s	29	87.9	483	G	ABP27387	Abp27387 Streptoco
6	29	87.9	483	σ	ABU46697	Abu46697 Protein e
7	28	84.8	6	œ	ADR44741	Adr44741 Human leu
8	28	84.8	0	œ	ADR44750	Adr44750 Human leu
φ	28	84.8	6	æ	ADR44754	Humar

ALI GNMENTS

ADR44753 standard; peptide; 6 AA.

RESULT 1
ADD447
AD 4470
AC ADR4
AC ADR4
AC ADR4
XX
DT 04-N
CX
DE Huma
XX
DE Huma
KW Arac
KW immu
KW acqu
KW immu
KW im ADR44753;

04-NOV-2004 (first entry)

Human leukocyte stimulating peptide, P23.

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

Homo sapiens.

The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the Claim 1; SEQ ID NO 34; 57pp; English. New laukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune Key Modified-site 07-FEB-2003; 2003US-0455621P 06-FEB-2004; 2004WO-KR000225 response to bacteria. WPI; 2004-604410/58. Ryu S, WO2004069858-A2. (POSC-) POSCO. (POST-) POSTECH FOUND. Bae Y, Park E, Location/Qualifiers /note= "C-terminal amide" Suh ₽,

Query Match 100.0%; Score 33; DB 8; Best Local Similarity 100.0%; Pred. No. 1.8e+06; Matches 6; Conservative 0; Mismatches 0; Length 6; Indels 0; Gaps

0;

Sequence 6 AA;

밁 Ş 1 MKYYVM 6

Search completed: September 29, 2005, 12:31:12 Job time: 80.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments)
21.672 Million cell updates/sec

Perfect score: US-10-774-147B-34 33

1 MKYYVM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : Issued_Patents_AA:* /ogn2_6/ptodata/1/laa/5A_COMB.pep: /cgn2_6/ptodata/1/laa/5B_COMB.pep: /cgn2_6/ptodata/1/laa/6B_COMB.pep: /cgn2_6/ptodata/1/laa/6B_COMB.pep: /cgn2_6/ptodata/1/laa/PCTUS_COMB.pep: /cgn2_6/ptodata/1/laa/backfiles1.pep:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Search completed: September 29, 2005, 12:42:02 Job time: 20.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Perfect score: US-10-774-147B-34 33

Sequence: 1 MKYYVM 6

Scoring table: BLOSUM62

Searched: 1846076 seqs, 415116000 residues Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters:

1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0%

Database :

Listing first 45 summaries Maximum Match 100%

```
Published_Applications_AA:

1: /cgn2_6/ptcdatca/1/pubpaa/U
2: /cgn2_6/ptcdatca/1/pubpaa/U
3: /cgn2_6/ptcdatca/1/pubpaa/U
4: /cgn2_6/ptcdatca/1/pubpaa/U
5: /cgn2_6/ptcdatca/1/pubpaa/U
6: /cgn2_6/ptcdatca/1/pubpaa/U
6: /cgn2_6/ptcdatca/1/pubpaa/U
8: /cgn2_6/ptcdatca/1/pubpaa/U
8: /cgn2_6/ptcdatca/1/pubpaa/U
9: /cgn2_6/ptcdatca/1/pubpaa/U
10: /cgn2_6/ptcdatca/1/pubpaa/U
11: /cgn2_6/ptcdatca/1/pubpaa/U
11: /cgn2_6/ptcdatca/1/pubpaa/U
12: /cgn2_6/ptcdatca/1/pubpaa/U
13: /cgn2_6/ptcdatca/1/pubpaa/U
13: /cgn2_6/ptcdatca/1/pubpaa/U
14: /cgn2_6/ptcdatca/1/pubpaa/U
15: /cgn2_6/ptcdatca/1/pubpaa/U
16: /cgn2_6/ptcdatca/1/pubpaa/U
18: /cgn2_6/ptcdatca/1/pubpaa/U
19: /cgn2_6/ptcdatca/1/pubpaa/U
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22: /cgn2_6/ptcdatca/1/pubpaa/U
22: /cgn2_6/ptcdatca/1/pubpaa/U
23: /cgn2_6/ptcdatca/1/pubpaa/U
24: /cgn2_6/ptcdatca/1/pubpaa/U
25: /cgn2_6/ptcdatca/1/pubpaa/U
26: /cgn2_6/ptcdatca/1/pubpaa/U
27: /cgn2_6/ptcdatca/1/pubpaa/U
28: /cgn2_6/ptcdatca/1/pubpaa/U
29: /cgn2_6/ptcdatca/1/pubpaa/U
20: /cgn2_6/
1: //cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
2: //cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
4: //cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
4: //cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
5: //cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
6: //cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
7: //cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
9: //cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
9: //cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
10: //cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
11: //cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
12: //cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
13: //cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
14: //cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
15: //cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
16: //cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
17: //cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
18: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
19: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
19: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
19: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
19: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
20: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
21: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
22: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
23: //cgn2_6/ptodata/1/pubpaa/USO0_NEW_PUB.pep:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.

Query Score Match Length DB ID

Description

116 117 118 119 119 119 119 119 119 119 119 119	1
N N N N N N N N N N N N N N N N N N N	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	1000 87.9 87.9 87.9 87.9 84.8 84.8 84.8
263 264 326 408 408 408 408 408 408 401 421 421 421 421 431 148 441 148 148 148 148 148 148 148 14	28 462 483 1229 1407 6 6 6 132 109
11111111111111111111111111111111111111	16 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
US-10-282-122A-48666 US-10-425-115-256190 US-10-425-115-256190 US-09-764-664-1060 US-09-802-213-9 US-10-664-421-132 US-10-941-635-134 US-10-941-635-134 US-10-941-635-115-264832 US-10-425-115-264832 US-10-947-992-011-10 US-10-948-937-56 US-10-094-749-39 US-10-146-605-2 US-10-774-147B-33 US-10-424-599-216487 US-10-424-599-216487 US-10-501-282-4766 US-10-501-282-4766 US-10-501-282-4766 US-10-501-282-4766 US-10-501-282-4766 US-10-501-282-4766 US-10-501-282-4766 US-10-947-26-607 US-10-501-282-4766 US-10-947-26-607 US-10-947-26-607 US-10-947-26-607 US-10-947-26-607	US-10-774-147B-34 US-10-424-599-206986 US-10-282-122A-72556 US-10-282-122A-72551 US-10-437-963-132817 US-10-437-963-132720 US-10-774-147B-22 US-10-774-147B-31 US-10-774-147B-35 US-10-774-147B-35 US-10-774-147B-35 US-10-784-864-1483 US-09-764-864-1483 US-09-764-864-1483 US-10-425-115-271499 US-10-425-115-271499 US-10-437-963-19233
	Sequence 34, Appl Sequence 70656, A Sequence 70656, A Sequence 74621, A Sequence 132817, Sequence 132720, Sequence 22, Appl Sequence 28, Appl Sequence 31, Appl Sequence 31, Appl Sequence 1092, Appl Sequence 1483, Ap Sequence 1483, Ap Sequence 1483, Ap Sequence 1932, Ap

ALI GNMENTS

RESULT 1 US-10-774-147B-34

```
Sequence 34, Application US/10774147B

Publication No. US2004024825A1

GENERAL INFORMATION:

APPLICANT: POSTECH Foundation
APPLICANT: POSTECH Foundation
APPLICANT: POSTECH FOUNDATION:

APPLICANT: PARK, Eum-Young
APPLICANT: SUH, Pann-Chill
TITLE OF INVENTION: LEUKOCYTE STIMULATING PEPTIDES

FILE REFERENCE: 1005-03USA
CURRENT APPLICATION NUMBER: US/10/774,147B

CURRENT APPLICATION NUMBER: US/60/445,621

PRIOR APPLICATION NUMBER: US 60/445,621

PRIOR APPLICATION NUMBER: US 60/445,621

PRIOR APPLICATION VUMBER: US 60/445,621

PRIOR APPLICANT: LEUKOCYTE STIMULATING PEPTIDES

FILE REFERENCE: 1004-02-05

PRIOR APPLICANT: LEUKOCYTE STIMULATION PEPTIDES

FILE REFERENCE: 1004-02-05

PRIOR APPLICANT: LEUKOCYTE STIMULATION PEPTIDES

FILE REFERENCE: 1004-02-05

PRIOR APPLICANT: LEUKOCYTE STIMULATION PEPTIDES

FILE REFERENCE: 1004-02-05

PRIOR APPLICANT: 1004-02-05

PRIOR APPLICANT: 1004-02-05

PRI
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0;

OM protein - protein search, using sw model

September 29, 2005, 12:13:23; Search time 14.5 Seconds (without alignments) 39.814 Million cell updates/sec

Title:
Perfect score:
Sequence: US-10-774-147B-34

1 MKYYVM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched:

283416

283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Query Query Match Length DB	DB	ID	Description
1	30	90.9	1010	2	B86259	protein T12C24.2 (
N	30	90.9	1036	N	A42895	H+/K+-exchanging A
ω	29	87.9	196	N	B96980	uncharacterized co
4	28	84.8	53	2	S42286	gene 0.6A protein
ر. ت	28	84.8	73	N	AB2594	hypothetical prote
6	28	84.8	84	2	C90210	conserved hypothet
7	28	84.8	111	1	WOBP67	gene 0.6B protein
8	28	84.8	277	_	G71101	hypothetical prote
9	28	84.8	320	N	C97206	probable membrane,
10	28	84.8	335	N	E71201	probable glucose-f
11	28	84.8	366	N	E90525	ABC transporter pe
12	28	84.8	471	N	A45616	antigenic protein
13	28	84.8	589	N	JG0196	protein kinase DYR

	3670		1/17	- !) i	л.
probable membrane	AF1047	∾	1106	_	27	44
	E65226		1107		27	43
probable periplasm	B86112		1107		27	42
probable periplasm	B91271		1107	81.8	27	41
hypothetical	S50580		688	-	27	40
hypothetica	T28113		522	-	27	39
. ORF MSV115 probabl	T28276		505	\sim	27	38
hypothetical	T34173		469	\mathbf{L}	27	37
hypothetical	T19113		465	81.8	27	36
hypothetical	T19111		460	-	27	35
hypothetical	T19110		459	-	27	34
hypothetical	T19109		457	\rightarrow	27	33
lactocepin (EC	A44833		404	81.8	27	32
matrix protein -	MFVNSY		345	81.8	27	31
_cell-shape determi	AF1630		337	81.8	27	0
cell-shape determi	AD1268	2	337	-	27	29
rod shape-determin	D69660		337	81.8	27	æ
probable integral	A71605		307	_	27	27
D-allulose-6-phosp	D65217		231	81.8	27	26
hypothetical	E90331		129	\mathbf{L}	27	S
hypothetical prote	T22330		3496	4	28	4
genome polyprotein	VFIHB2		2652	4	28	23
N-methyl-D-asparta	S52086		1484	4	28	N
N-methyl-D-asparta	B43274		1482	84.8	28	21
glutamate receptor	I 49704		1482	•	28	0
polyprotein -	PQ0440		1202	4	28	19
polyprotein -	PQ0442	N	1041	84.8	28	00
trehalose/maltose	E97230	2	757	84.8	28	17
Down-syndrome-cri	JC4898	-	754	Φ	28	σ
metalloproteinase	JC7818	2	727	•	28	5
procetti ktiidae	000100					4

Search completed: September 29, 2005, 12:39:51 Job time: 14.5 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments) 43.893 Million cell updates/sec

Title: Perfect score: Sequence: US-10-774-147B-34 33

1 MKYYVM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	% Query Match	% Query Match Length DB	BB	ID	Description
1	33	100.0	335	2	Q8GP65	Q8gp65 streptococc
Ν	32	97.0	373	٧	Q697F8	Q697f8 neomaskelli
ω	30	90.9	108	Ν	Q8EJN3	Q8ejn3 shewanella
4	30	90.9	226	2	Q9QW05	Q9qw05 rattus sp.
υ	30	90.9	287	2	QBV3Q3	Q8v3q3 swinepox vi
o	30	90.9	490	N	Q621P8	-
7	30	90.9	490	N	Q63VM0	Q63vm0 burkholderi
80	30	90.9	1010	N	Q9LN91	Q9ln91 arabidopsis
9	30	90.9	1035	_	ATHL_MOUSE	Q9z1w8 mus musculu
10	30	90.9	1036	_	ATHL_RAT	P54708 rattus norv
11	30	90.9	1163	~	Q8XKW3	Q8xkw3 clostridium
12	30	90.9	1574	N	Q6DRC7	Q6drc7 brachydanio
13	29	87.9	187	2	Q64T81	Q64t81 bacteroides
14	29	87.9	196	N	Q97LB0	Q971b0 clostridium
15	29	87.9	364		TRU2_THETN	Q8r7f0 thermoanaer

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
226	204	187	164	129	123	117	111	105	103	84	73	53	53	3290	1806	817	633	613	597	597	588	483	483	483	483	462	457	457	417
2	N	Ν	2	2	~	N	_	2	N	2	2	2	N	2	N	2	2	8	N	N	2	N	N	2	2	N	2	N	N
Q8J107	Q6AXW7	Q812B8	Q8X052	Q8XNC3	Q9PW83	Q6FTA8	V06_BPT7	Q8D9S2	Q6Y7K6	Q97ZQ8	Q8UIZ7	Q6WYR9	Q6WY58	Q7RRX0	Q6LFB1	Q7QANO	Q8MTK1	Q89HC1	Q631W2	Q62EB8	Q6N209	Q878W3	Q99Z85	Q8P0H3	Q8K721	Q8DUV5	Q8E6F6	Q8E0T8	Q6CMW6
Q8ji07 brachydanio	Q6axw7 rattus norv	Q8i2b8 plasmodium	Q8x052 neurospora		Q9pw83 myoxocephal	Q6fta8 candida gla	P03778 bacteriopha	Q8d9s2 vibrio vuln					Q6wy58 bacteriopha	Q7rrx0 plasmodium	plasmodium	Q7qan0 anopheles g		Q89hc1 bradyrhizob	Q63iw2 burkholderi		Q6n209 rhodopseudo			Q8p0h3 streptococc	Q8k721 streptococc	Q8duv5 streptococc	Q8e6f6 streptococc	Q8e0t8 streptococc	Q6cmw6 kluyveromyc

ALI GNMENTS

SQ	DR	DR	DR	DR	RL	RΑ	RP	RN	0 X	င္ပ	ဂိ	SO	2	DE	DT	DT	DT	ΑĊ	ID	Q8GP65	RESU
SEQUENCE 3	Pfam; PF0175	InterPro; II	GO; GO:00167	EMBL; AF4545	Submitted (I	Rallu F., Et	SEQUENCE FROM N.A.	Ξ	NCBI_TaxID=1308;	Streptococcus	Bacteria; Fi	Streptococcu	Name=eps100;	Eps100.	01-JUN-2003	01-MAR-2003	01-MAR-2003	Q8GP65;	Q8GP65	65	RESULT 1
SEQUENCE 335 AA; 39165 MW; 3D4218614060BC92 CRC64;	757; Acyl transf 3; 1.		GO; GO:0016747; F:transferase activity, transferring groups o; IEA.	EMBL; AF454500; AAN63775.1;	Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.	Rallu F., Ehrlich D.S., Renault P.;	ROM N.A.		≥ 1308;	cus.	Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;	Streptococcus thermophilus.	0;		01-JUN-2003 (TrEMBLrel. 24, Last annotation update)	01-MAR-2003 (TrEMBLrel. 23, Last sequence update)	3 (TrEMBLrel. 23, Created)		PRELIMINARY; PRT; 335 AA.		

Query Match 100.0%; Score 33; DB 2; Length 335; Best Local Similarity 100.0%; Pred. No. 39; Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MKYYVM 6 |||||| |Db 200 MKYYVM 205

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Search completed: September 29, 2005, 12:38:18 Job time : 71 secs

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3

OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Perfect score: Title: US-10-774-147B-35 36

Scoring table: 1 МКҮҮҮМ 6

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters: 2105692

2105692 seqs, 386760381 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

A_Geneseq_16Dec04:*
1: geneseqp1900s:*
2: geneseqp1900s:*
3: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003as:*
8: geneseqp2003as:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

9	æ	7	6	₅	4	ω	2		Result
33	33	33	33	33	33	33	33	36	Score
91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	100.0	Query Match
504	504	504	504	504	484	482	477	0	Query Match Length DB
6	ഗ	2	N	N	4	N	4	ω	8
ABP57063	ABB99292	AAR73945	AAR72507	AAR24482	ABB66961	AAR72601	ABB64297	ADR44754	ID
	Abb99292 Human CYP		Aar72507 Human chl	Aar24482 Cholester	Abb66961 Drosophil	Aar72601 Truncated	Abb64297 Drosophil	Adr44754 Human leu	Description

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
29	29	29	29	29	29	29	29	29	29	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	33	33	33
80.6	0	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	83.3	83.3	83.3	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	:	91.7	
203	199	178	178	166	166	138	110	89	85	845	467	150	509	509	456	438	434	432	406	333	297	276	215	169	169	148	148	110	110	91	σ	6	504	504	504
7	7	œ	7	8	Ç	2	4	4	4	4	7	Ν	ω	N	σ	σ	σ	Q	2	ω	თ	ω	4	ω	ω	æ	Ģ	0	4	თ	ω	ω	ω	7	7
ADF74792	ADF74794	ADH80142	ADJ38055	ADS04576	ABP39434	AAY44013	AAO01396	AAM90587	AAG64443	ABB63310	AB061273	AAW98204	AAY44603	AAY14138	ADB10720	ADB10722	ABP75890	ADB10724	AAR12395	AAG47283	AAU73401	AAG11708	ABB65782	AAG11709	AAG47284	ADS06816	ABP38990	ABM37293	AAU40774	ABP42120	ADR44748	ADR44742	ADI19748	ADF90913	ADD48632
Adf74792 Human NOV	Adf74794 Human NOV	Adh80142 Mortierel			Abp39434 Staphyloc	Aay44013 Human tes	Aao01396 Human pol		Aag64443 Human Pol	0	Abo61273 Klebsiell	Aaw98204 H. pylori	ω	Aay14138 Zea mays	0	Adb10722 Alloiococ	0	Adb10724 Alloiococ	Aar12395 Transcrip	ω		Aag11708 Arabidops		9			0	Abm37293 Propionib	4 Propi		Adr44748 Human leu		Human	Adf90913 Human hep	Add48632 Human Pro

ALI GUMENTS

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- ADR44754 standard; peptide; 6 AA.
- ADR44754;
 - 04-NOV-2004 (first entry)

 - Human leukocyte stimulating peptide, P24.
 - Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.
- Homo sapiens.

New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune 06-FEB-2004; 2004WO-KR000225. WPI; 2004-604410/58. Ryu S, 07-FEB-2003; 2003US-0455621P WO2004069858-A2. Key Modified-site (POST-) POSTECH FOUND. (POSC-) POSCO. Bae Y, Park E, /note= "C-terminal amide" Location/Qualifiers Suh P

Claim 1; SEQ ID NO 35; 57pp; English.

response to bacteria.

diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human

Sequence 6 AA;

Query Match
Best Local Similarity
Matches 6; Conserv Conservative 100.0%; Score 36; DB 8; 100.0%; Pred. No. 1.8e+06; vative 0; Mismatches 0; Length 6; Indels 0; Gaps

0;

뭉 Š 1 MKYYYM 6 мкүүүм б

Search completed: September 29, 2005, 12:31:12 Job time : 80.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein protein search, using sw model

Rus 9 September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments) 21.672 Million cell updates/sec

Perfect score: Title: US-10-774-147B-35 36

1 MKYYYM 6

Scoring table: BLOSUM62

513545 seqs, 74649064 residues Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100%

Database :

Listing first 45 summaries

Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/
2: /cgn2_6/ptodata/1/
3: /cgn2_6/ptodata/1/
4: /cgn2_6/ptodata/1/
5: /cgn2_6/ptodata/1/
6: /cgn2_6/ptodata/1/ /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:* /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

11	10	9	8	7	6	G	4	ω	2	1	Result
33	33	33	33	33	33	33	33	33	33	33	Score
91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	Query Match Length DB
504	504	504	504	504	504	504	482	482	482	482	Length
4	Ν	۳	۲	-	_	-	2	-	-	1	BB
US-09-762-415-4	US-08-477-952-8	US-08-187-453-28	US-08-477-953-8	US-08-361-458-3	US-08-483-852-8	US-08-135-511-28	US-08-477-952-5	US-08-477-953-5	US-08-483-852-5	US-08-135-510-5	ID
Sequence 4, Appli	Sequence 8, Appli	Sequence 28, Appl	Sequence 8, Appli	Sequence 3, Appli	Sequence B, Appli	Sequence 28, Appl	Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Description

44 45	4 3	42	2 6	39	38	37	36	35	34	3 3	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
29 29	29	29	ນ ຄ. 9	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	31	31	31	31	31	31	33	33	33
00	0	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	83.3	83.3	86.1	86.1	86.1	86.1	86.1	86.1	91.7	:	91.7
291 293	289	289	286	280	280	259	259	258	257	243	219	178	178	166	151	151	138	66	23	23	467	282	509	509	509	509	148	121	507	506	506
44	Α,	~ 4	• •	4	4	4	4	4	4	4	4	4	4	ω	ω	-	2	4	4	4	4	4	4	4	ω	-	ω	4	4	ω	Ν.
-456- -828 <i>}</i>	-09-903	US-09-143-626A-17	-09-903-	US-09-903-456-28	US-09-145-828A-21	US-09-270-767-52816	US-09-270-767-37599	US-09-698-781-3	US-09-949-016-7490	US-09-541-759-7	US-09-903-456-38	US-09-903-456-26	US-09-145-828A-24	US-09-134-001C-4279	US-09-130-287-28	US-08-614-935-28	US-07-857-224B-112	US-09-248-796A-23669	US-09-270-767-50769	US-09-270-767-35552	US-09-489-039A-7790	US-09-248-796A-25927	US-09-535-315-8	US-09-347-650-6	US-09-183-959-8	US-10-095-946-8	US-09-134-001C-3835	US-09-248-796A-14633	US-09-949-016-10802	US-09-270-751-18	US-08-845-161A-18
36, 12,	34,	Sequence 11, Appl	59,	28,			37	3, App		Sequence 7, Appli		26,			28,	28,	Sequence 112, App	Sequence 23669, A		35552,		259	В	6	B	B, App	Sequence 3835, Ap		1080	18,	Sequence 18, Appl

Search completed: September 29, 2005, 12:42:02 Job time : 20.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Perfect score: Title: US-10-774-147B-35

Sequence: 1 MKYYYM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

```
Published Applications_AA:*

1: /cgn2_6/ptcdata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptcdata/1/pubpaa/PCT_NEW_PUB.pep:*

3: /cgn2_6/ptcdata/1/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptcdata/1/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptcdata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptcdata/1/pubpaa/US08_NEW_PUB.pep:*

7: /cgn2_6/ptcdata/1/pubpaa/US08_NEW_PUB.pep:*

8: /cgn2_6/ptcdata/1/pubpaa/US08_PUBCOMB.pep:*

8: /cgn2_6/ptcdata/1/pubpaa/US08_PUBCOMB.pep:*
             9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
11: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
15: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
17: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
18: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
19: /cgn2_6/ptodata/1/pubpaa/US1A_PUBCOMB.pep:*
20: /cgn2_6/ptodata/1/pubpaa/US1A_PUBCOMB.pep:*
21: /cgn2_6/ptodata/1/pubpaa/US1A_PUBCOMB.pep:*
22: /cgn2_6/ptodata/1/pubpaa/US1A_PUBCOMB.pep:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

ALI GNMENTS

RESULT 1 US-10-774-147B-35

```
; Sequence 35, Application US/10774147B
; Publication No. US20040248255A1
; GENERAL INFORMATION:
; APPLICANT: POSTECH Foundation
; APPLICANT: POSTECH FOUNDATION:
; APPLICANT: RYU, Sung-Ho
; APPLICANT: RYU, Sung-Ho
; APPLICANT: RYU, Sung-Ho
; APPLICANT: SUH, Pann-GGill
; TITLE OF INVENTON: LEUCOCYTE STIMULATING PEPTIDES
; FILE REFERENCE: 10050-03USA
; CURRENT FILING DATE: 2004-02-05
; PRIOR APPLICATION NUMBER: US 60/445,621
; PRIOR FILING DATE: 2003-02-07
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 35
; LENGTH: 6
; TYPE: PRI
; ORGANISM: Artificial sequence
; PEATURE:
; OTHER INFORMATION: Synthetic
; PEATURE:
; OTHER INFORMATION: P24
US-10-774-147B-35

Query Match
Best Local Similarity 100.0%; Score 36; DB 16; Length 6;
Best Local Similarity 100.0%; Pred. No. 1.70+06;
Matches 6; Conservative 0; Mismatches 0; Indels
Qy 1 MKYYYM 6

Search completed: September 29, 2005, 12:49:48

Job time: 76.5 secs
```

0; Gaps

0;

OM protein - protein search, using sw model

		Run on:
		September
		29,
		2005,
39.814 Million cell updates/sec	(without alignments)	September 29, 2005, 12:13:23 ; Search time 14.5 Seconds

Title: Perfect score: Sequence: US-10-774-147B-35 36

1 МКҮҮҮМ 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 283416

283416 seqs, 96216763 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		æ				ţ
Result No.	Score	Query Match	Query Match Length DB	DB	IĐ	Description
L I	33	91.7	416	2	T23383	hypothetical prote
2	33	91.7	501	2	146701	cholesterol 7alpha
ω	33	91.7	504		JH0659	cholesterol 7alpha
4	31	86.1	108	N	T17826	hypothetical prote
ۍ	31	86.1	165	N	B97354	hypothetical prote
6	31	86.1	214	2	E46681	glutathione transf
7	31	86.1	399	2	C96908	(FS) similar to AB
8	31	86.1	406	N	A36706	transcription acti
9	31	86.1	591	-	NUZQF	glucose-6-phosphat
10	31	86.1	804	N	A37473	probable RNA polym
11	30	83.3	150	N	E64599	hypothetical prote
12	30	83.3	150	2	871912	hypothetical prote
13	30	83.3	416	N	A70393	hypothetical prote

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27 .	26	25	24	23	22	21	20	19	18	17	16	15	14
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29
77.8	77.8		77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	80.6	80.6	80.6	80.6	80.6	80.6	80.6
375	373	370	366	361	359	359	321	321	300	300	239	211	210	194	182	164	161	131	120	118	107	68	18	40	599	599	504	503	379	245	243
Νı	N I	N	N	N	N	2	N	N	N	2	Ŋ	Ŋ	2	N	N	2	2	2	2	2	2	N	N	2	N	2	2	2	2	2	2
E81442	\$54545	F84151	F83970	T38693	T21840	C69369	H69482	H45774	JW0048	JC7115	B84257	AB3178	H97149	A55756	T16519	H64329	H58932	G69442	S36306	H90457	AG1753	T15018	A24522	S26797	D98267	AD3017	S39399	A54779	S74601	S68691	в33329
probable MCP-domai	i ca i	response regulator	poru	Co		hypothetical prote	hypothetical prote	odorant receptor 3	ets transcription	ets homologous fac	hypothetical prote	glutathione S-tran	hypothetical prote		hypothetical prote		ribosomal protein	transcription regu	T-cell receptor de	hypothetical prote	Orf49 (bacteriopha	hypothetical prote	mitochondrial prot	Ig heavy chain V r	ABC transporter AT	hypothetical prote		cholesterol 7alpha	hypothetical prote	neutrophil granule	cysteine-rich secr

Search completed: September 29, 2005, 12:39:52 Job time: 15.5 secs

OM protein - protein search, using sw model

September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments) 43.893 Million cell updates/sec

Title: US-10-774-147B-35
Perfect score: 36

Sequence: 1 МКҮҮҮМ 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	% Query Match Length DB	BB	ID	Description
1	33	91.7	290	2	Q86PB1	Q86pb1 drosophila
N	33	91.7	316	N	QBT7L5	
ω	33	91.7	457	N	Q814H6	
4	33	91.7	477	N	QBNOR9	
տ	33	91.7	484	_	ATE1 DROME	096539 drosophila
σ	33	91.7	484	N	80HI8O	Q8ih08 drosophila
7	33	91.7	485	N	P90914	P90914 caenorhabdi
8	33	91.7	501	<u></u>	CP7A_PIG	046491 sus scrofa
9	33	91.7	501	<u>, , , , , , , , , , , , , , , , , , , </u>	CP7A_RABIT	P51542 oryctolagus
10	33	91.7	504	سر	CP7A_HUMAN	P22680 homo sapien
11	33	91.7	513	2	Q76CE9	Q76ce9 gallus gall
12	33	91.7	779	N	Q7RKW9	Q7rkw9 plasmodium
13	32	88.9	565	2	Q8PYC5	Q8pyc5 methanosarc
14	32	88.9	864	2	Q8TJ15	Q8tj15 methanosarc
15	31	86.1	58	2	Q9XQQ3	Q9xqq3 toxoplasma

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
86.1	86.1	86.1	1.98	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	1.98	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
620	591	586	579	529	509	486	470	461	409	406	400	400	399	333	314	314	311	297	297	277	261	248	239	215	203	165	108	84	76
N	-	N	Ŋ	N	N	N	N	N	N	-	N	N	N	N	N	N	N	N	N	N	Ŋ	N	N	-	N	N	N	N	2
Q9W708	G6PI_PLAFA	Q7RRU9	Q8ILA4	Q7XSQ6	Q94CH1	Q8TP90	Q6L1K5	Q84KZ3	Q8N4J0	NPRA_BACST	Q80UY1	Q9CWF3	Q97MX2	Q9FK56	Q7BUG0	031091	Q7Z383	Q9L6Z3	Q9ACJ4	Q8N7C5	Q8IAS2	Q8KDT6	Q8RBB5	GTT4_DROME	Q6ABR8	Q97CY9	Q84641	Q6MSF6	Q74KM6
Q9w708 xenopus lae	P18240 plasmodium	Q7rru9 plasmodium		Q7xsq6 oryza sativ	Q94chl zea mays (m	-	Q611k5 picrophilus		Q8n4j0 homo sapien	P43130 bacillus st		Q9cwf3 mus musculu	Q97mx2 clostridium	Q9fk56 arabidopsis		031091 rhizobium 1	-		Q9acj4 ehrlichia c	-	Q8ias2 plasmodium	٠.		Q9vg96 drosophila	Q6abr8 propionibac	Q97cy9 clostridium	Q84641 paramecium	Q6msf6 mycoplasma	Q74km6 lactobacill

Search completed: September 29, 2005, 12:38:18 Job time : 70 secs